



**REQUEST FOR QUOTATION
NO. 99-SQ-30-0016
COMMERCIAL ITEM
TOTAL SMALL BUSINESS SET-ASIDE**

**Turbine and Generator Bearings
Lubricating System
and
Hydrostatic Lift System
Hydraulic Power Unit
at Headgate Rock Powerplant**

**BIA
Arizona**

Lower Colorado Regional Office
Boulder City, Nevada
1999



United States Department of the
Interior
Bureau of Reclamation

www.lc.usbr.gov/~g3100

**TURBINE AND GENERATOR BEARINGS
LUBRICATING SYSTEM
AND
HYDROSTATIC LIFT SYSTEM
HYDRAULIC POWER UNIT
AT
HEADGATE ROCK POWERPLANT**

HEADGATE ROCK HYDROELECTRIC PROJECT, ARIZONA

FOREWORD

The Bureau of Reclamation requires that the successful offeror design, furnish, install and test three new hydraulic power units for the turbine and generator bearing lubrication system in accordance with the drawings and these specifications. Each hydraulic power unit shall consist of a high pressure hydrostatic lift system and a low pressure lubricating system. All components for each system shall be installed on one reservoir. The Contractor shall furnish all the components for the high pressure pumping unit including the reservoirs and support frames. The Government shall furnish all the low pressure pumping units and associated equipment for the existing hydraulic power units for installation by the Contractor.

Headgate Rock Dam and Powerplant is located 1 mile north of the town of Parker, Arizona, approximately 1 mile west of the main road between the town of Parker and Parker Dam which is 14.4 miles upstream. The lubricating systems were damaged by water when the plant was flooded in October 1998.

A site visit is scheduled for August 23, 1999, at 10 a.m. Mountain Standard Time. Participants will meet at the Headgate Rock Powerplant parking area. Those wishing to attend the site visit should contact the Parker Dam Facilities Manager at 760-663-3712.

ACQUISITION OF THE ABOVE WORK WILL BE PURSUANT TO THE FEDERAL ACQUISITION REGULATIONS SUBPART 13.5, TEST PROGRAM FOR CERTAIN COMMERCIAL ITEMS WHICH AUTHORIZES ACQUISITIONS UP TO \$5 MILLION BE PROCURED UTILIZING SIMPLIFIED ACQUISITION PROCEDURES.

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Attachment No. 1 - Drawings

SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS				1. REQUISITION NUMBER 99315200006		PAGE 1 OF 64 PAGES	
<i>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30</i>							
2. CONTRACT NO.		3. AWARD/EFFECTIVE DATE		4. ORDER NUMBER		5. SOLICITATION NUMBER 99-SQ-30-0016	
						6. SOLICITATION ISSUE DATE 8/16/99	
7. FOR SOLICITATION INFORMATION CALL:		a. NAME Beverly K. Nelson (e-mail: bnelson@lc.usbr.gov)			b. TELEPHONE NUMBER (No collect calls) (702) 293-8524		8. OFFER DUE DATE/ LOCAL TIME 8/30/99 @ 3:00 PM
9. ISSUED BY		CODE LC-3113		10. THIS ACQUISITION IS <input type="checkbox"/> UNRESTRICTED <input type="checkbox"/> SET ASIDE % FOR <input checked="" type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> SMALL DISADV. BUSINESS <input type="checkbox"/> 8(a) SIC: 3594 SIZE STANDARD: 500 employees		11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE <input type="checkbox"/> 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	
Mail to: Bureau of Reclamation Lower Colorado Regional Office P.O. Box 61470 Boulder City NV 89006-1470		Overnight Mail to: Bureau of Reclamation Lower Colorado Regional Office 400 Railroad Avenue Boulder City NV 89005				12. DISCOUNT TERMS	
						13b. RATING	
						14. METHOD OF SOLICITATION <input checked="" type="checkbox"/> RFQ <input type="checkbox"/> IFB <input type="checkbox"/> RFP	
15. DELIVER TO		CODE		16. ADMINISTERED BY		CODE LC-3113	
Headgate Rock Powerplant, Arizona				Bureau of Reclamation Lower Colorado Regional Office P.O. Box 61470 Boulder City NV 89006-1470			
17a. CONTRACTOR/ OFFEROR		CODE		FACILITY CODE		18a. PAYMENT WILL BE MADE BY	
						CODE D-7734	
TELEPHONE NO.						U.S. Department of the Interior Bureau of Reclamation Reclamation Service Center P.O. Box 25508 Denver CO 80225-0508	
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER				18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED <input checked="" type="checkbox"/> SEE ADDENDUM			
19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES			21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	SEE PARAGRAPH 4. CONTINUATION OF BLOCKS 19 THROUGH 24 <i>(Attach Additional Sheets as Necessary)</i>						
25. ACCOUNTING AND APPROPRIATION DATA						26. TOTAL AWARD AMOUNT (For Govt. Use Only)	
<input checked="" type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4. FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDA <input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED.							
<input checked="" type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA <input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED.							
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN <u>1</u> COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.				29. AWARD OF CONTRACT: REFERENCE OFFER DATED _____ YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS: <input type="checkbox"/>			
30a. SIGNATURE OF OFFEROR/CONTRACTOR				31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)			
30b. NAME AND TITLE OF SIGNER (TYPE OR PRINT)			30c. DATE SIGNED	31b. NAME OF CONTRACTING OFFICER (TYPE OR PRINT)			31c. DATE SIGNED
32a. QUANTITY IN COLUMN 21 HAS BEEN <input type="checkbox"/> RECEIVED <input type="checkbox"/> INSPECTED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED				33. SHIP NUMBER <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		34. VOUCHER NUMBER	
32b. SIGNATURE OF AUTHORIZED GOVT. REPRESENTATIVE				32c. DATE		35. AMOUNT VERIFIED CORRECT FOR	
				36. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		37. CHECK NUMBER	
				38. S/R ACCOUNT NUMBER		39. S/R VOUCHER NUMBER	
41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER				41c. DATE		40. PAID BY	
41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT				42a. RECEIVED BY (Print)			
				42b. RECEIVED AT (Location)			
				42c. DATE REC'D (YY/MM/DD)		42d. TOTAL CONTAINERS	

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (VRS), Office of Federal Acquisition Policy, GSA, Washington, DC 20405

OMB No.: 9000-0136
Expires: 09/30/98

CONTINUATION OF BLOCKS FROM SF 1449

1. Block 15: Delivery To

(a) All supplies or equipment required under this contract shall be shipped f.o.b., destination to the following address:

Headgate Rock Dam Powerplant
Parker, Arizona 85344

(b) Deliveries will be accepted between 6:30 a.m. to 3:00 p.m., local time, Monday through Thursday, except Federal holidays. Point of contact for delivery information is Parker Dam Facility Manager, telephone No. 760-663-3712.

2. Block 16: Government Administration Personnel

The contracting office representative responsible for overall administration of this contract is:

Beverly Nelson (Mail Code: LC-3113), Contract Specialist
Bureau of Reclamation
P.O. Box 61470
Boulder City, Nevada 89006-1470
Phone No.: (702) 293-8524
Fax No.: (702) 293-8499
E-mail address: bnelson@lc.usbr.gov

3. Block 17a: Contractor's Administration Personnel

Offerors are requested to designate a person who will be in charge of overall administration of this contract.

Name: _____

Title: _____

Address: _____

City/State/Zip: _____

Telephone No: (____) ____ - _____

Fax No.: (____) ____ - _____

E-mail address: _____

4. Block 18b: Submission of Invoices.

(a) The COR has been designated authority to approve invoices for payments under the contract. To ensure timely processing of payments under the contract, the designated billing office for such payments is: Mr. Jack Delp (LC-6000), Bureau of Reclamation, PO Box 61470, Boulder City NV 89006-1470.

(b) Final payment under the contract will be approved by the Contracting Officer. The final invoice will be approved pursuant to the Prompt Payment clause in the contract after all contract settlement actions are complete. To ensure timely processing, the designated billing office for the final invoice is Ms. Beverly Nelson (LC-3113), Bureau of Reclamation, Lower Colorado Region, PO Box 61470, Boulder City NV 89006.

5. Blocks 19 Through 24: Schedule of Supplies/Services.

(a) The Requirements.

(1) The Contractor shall furnish the items identified in this Section, in accordance with the terms, conditions, and specifications contained in the contract.

(2) An offeror proposing prices on only part of a schedule will not be considered for award.

(3) Items 9-14 below are estimated quantities and are therefore applicable to the "Variation in Estimated Quantity" clause of this contract.

(b) The Schedule of Supplies/Services.

19. Item No.	20. Schedule of Supplies/Services	21. Quantity	22. Unit	23. Unit Price	24. Amount
1	Design, assemble, shop test and furnish three hydraulic power units and furnish spare parts	For the lump sum of		-----	\$
2	Field assembly and installation of three hydraulic power units	For the lump sum of		-----	\$
3	Servicing and testing three completely assembled hydraulic power units	For the lump sum of		-----	\$
4	Erecting Engineer onsite during commissioning of first unit; regular time	15 days			\$
5	Erecting Engineer onsite during commissioning of first unit; overtime -	7 days			\$
6	Erecting Engineer onsite during commissioning of second unit; regular time	15 days			\$

19. Item No.	20. Schedule of Supplies/Services	21. Quantity	22. Unit	23. Unit Price	24. Amount
7	Erecting Engineer onsite during commissioning of second unit; overtime	7 days			\$
8	Erecting Engineer onsite during commissioning of third unit; regular time	15 days			\$
9	Erecting Engineer onsite during commissioning of third unit; overtime	7 days			\$
	Total for Schedule				\$

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PART II
CONTRACT CLAUSES

1. 52.212-4 Contract Terms and Conditions--Commercial Items (May 1999)

(a) Inspection/Acceptance. The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. The Government must exercise its postacceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) Assignment. The Contractor or its assignee's rights to be paid amounts due as a result of performance of this contract, may be assigned to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727).

(c) Changes. Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) Disputes. This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) Definitions. The clause at FAR 52.202-1, Definitions, is incorporated herein by reference.

(f) Excusable Delays. The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) Invoice. The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized) to the address designated in the contract to receive invoices. An invoice must include--

(1) Name and address of the Contractor;

(2) Invoice date;

- (3) Contract number, contract line item number and, if applicable, the order number;
- (4) Description, quantity, unit of measure, unit price and extended price of the items delivered;
- (5) Shipping number and date of shipment including the bill of lading number and weight of shipment if shipped on Government bill of lading;
- (6) Terms of any prompt payment discount offered;
- (7) Name and address of official to whom payment is to be sent; and
- (8) Name, title, and phone number of person to be notified in event of defective invoice.

Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) Circular A-125, Prompt Payment. Contractors are encouraged to assign an identification number to each invoice.

(h) Patent Indemnity. The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

(i) Payment. Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract. The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) Circular A-125, Prompt Payment. If the Government makes payment Electronic Funds Transfer (EFT), see 52.212-5(b) for the appropriate EFT clause. In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

(j) Risk of Loss. Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

- (1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or
- (2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) Taxes. The contract price includes all applicable Federal, State, and local taxes and duties.

(l) Termination for the Government's Convenience. The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such

termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) Termination for Cause. The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) Title. Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

(o) Warranty. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(p) Limitation of Liability. Except as otherwise provided by an express or implied warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

(q) Other Compliances. The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) Compliance with Laws Unique to Government Contracts. The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C 327, et seq., Contract Work Hours and Safety Standards Act; 41 U.S.C. 51-58, Anti-Kickback Act of 1986; 41 U.S.C. 265 and 10 U.S.C. 2409 relating to whistle blower protections; 49 U.S.C 40118, Fly American; and 41 U.S.C. 423 relating to procurement integrity.

(s) Order of Precedence. Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order: (1) the schedule of supplies/services; (2) the Assignments, Disputes, Payments, Invoice, Other Compliances, and Compliance with Laws Unique to Government Contracts paragraphs of this clause; (3) the clause at 52.212-5; (4) addenda to this solicitation or contract, including any license agreements for computer software; (5) solicitation provisions if this is a solicitation; (6) other paragraphs of this clause;

(7) the Standard Form 1449; (8) other documents, exhibits, and attachments; and (9) the specification.

2. Addendum to 52.212-4 Contract Terms and Conditions--Commercial Items (May 1999).

- (a) Modification to Paragraph (g). Only an original invoice is required to be submitted. Additional copies are not required.
- (b) Modification to Paragraph (i). Payment shall be made for the items and services accepted by Government that have been delivered to the destinations and/or performed in accordance with the specifications set forth in this contract. The Government may make payment on a percentage of completion basis.
- (c) Modifications to Paragraph (o). The Contractor also warrants the following:
 - (1) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (9) below, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.
 - (2) This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.
 - (3) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of--
 - (i) The Contractor's failure to conform to contract requirements; or
 - (ii) Any defect of equipment, material, workmanship, or design furnished.
 - (4) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.
 - (5) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.
 - (6) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

(7) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall--

- (i) Obtain all warranties that would be given in normal commercial practice;
- (ii) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and
- (iii) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.

(8) In the event the Contractor's warranty under paragraph (2) above has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.

(9) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.

(10) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

(d) Additional Applicable Terms and Conditions

(1) 52.252-2 Clauses Incorporated by Reference (Feb 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically via the Internet at <http://www.arnet.gov/far>.

Federal Acquisition Regulation (48 CFR Chapter 1) Clauses

- 52.211-5 Material Requirements (Oct 1997)
- 52.211-13 Time Extensions (Apr 1984)
- 52.211-18 Variation in Estimated Quantity (Apr 1984)
- 52.219-6 Notice of Total Small Business Set-aside (Jul 1996)
- 52.228-5 Insurance - Work on a Government Installation (Jan 1997)
- 52.232-11 Extras (Apr 1984)
- 52.236-2 Differing Site Conditions (Apr 1984)
- 52.236-3 Site Investigation and Conditions Affecting the Work (Apr 1984)
- 52.236-5 Material and Workmanship (Apr 1984)
- 52.236-6 Superintendence by the Contractor (Apr 1984)
- 52.236-7 Permits and Responsibilities (Nov 1991)

- 52.236-9 Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements (Apr 1984)
- 52.236-10 Operations and Storage Areas (Apr 1984)
- 52.236-11 Use and Possession Prior to Completion (Apr 1984)
- 52.236-12 Cleaning up (Apr 1984)
- 52.236-13 Accident Prevention (Nov 1991)
- 52.242-14 Suspension of Work (Apr 1984)
- 52.242-15 Stop Work Order (Aug 1989)
- 52.242-17 Government Delay of Work (Apr 1984)
- 52.245-4 Government-furnished Property (Short Form) (Apr 1984)
- 52.247-34 F.O.B. Destination (Nov 1991)

(2) 52.211-9 Desired and Required Time of Delivery (Jun 1997)

(a) Completion of the work on Generating Unit No. 2 in the earliest amount of time possible is of the utmost importance to the Government. Because of this, the Government intends to include the Proposed Completion Schedule of Generating Unit No. 2 as an evaluation factor for award.

(b) The Government desires completion of the following work to be made according to the following schedule:

DESIRED COMPLETION SCHEDULE	
Generating Unit No.	Date Desired
2	No later than 12/1/1999
3	No later than 3/1/2000
1	No later than 5/1/2000

(c) If the offeror is unable to meet the Desired Completion Schedule, it must at least meet the following Required Completion Schedule in order to be considered for award. Those offeror's proposing a completion schedule in excess of the Required Completion Schedule will be considered unacceptable and ineligible for award.

REQUIRED COMPLETION SCHEDULE	
Generating Unit No.	Maximum Date Required
2	No later than 1/31/2000
3	No later than 3/1/2000
1	No later than 5/1/2000

(d) If the offeror is unable to meet the desired completion schedule, it may propose an alternate completion schedule in the table provided below. However, the offeror's proposed completion schedule shall not extend the completion time beyond the dates specified in the Required Completion Schedule:

PROPOSED COMPLETION SCHEDULE	
Generating Unit No.	Date Proposed
2	
3	
1	

NOTE: Offerors are to place a date, not a specific number of days, in the column titled "Date Proposed." Additionally, do not condition your proposed schedule, e.g. specific date of award, approval of drawings, etc. This may result in your proposal being unacceptable and therefore ineligible for award.

- (e) Offers failing to include the "Proposed Completion Schedule" with their proposals will not be considered for award.
- (f) Offers will be evaluated as outlined in the provision entitled "Evaluation -- Commercial Items."

(3) Performance Period for Erecting Engineer Services

The contract requires the services of an Erecting Engineer onsite during the commissioning of each of the units. It is unknown at this time when the commissioning of the units will occur. It is anticipated that the commissioning will take place shortly after completion of the work on each unit (see Time of Delivery clause above). The Contractor will be notified 14 calendar days prior to commencement of the commissioning of the date the Erecting Engineer is required to be onsite.

The following is an estimated performance period for the commissioning:

ESTIMATED COMMISSIONING SCHEDULE		
Generating Unit No.	Regular Time Days	Overtime Days
2	15	7
3	15	7
1	15	7

(4) WBR 1452.236-81 Services of Erecting Engineers -- Bureau of Reclamation
(Jul 1993)

(a) Requirement. The Contracting Officer may direct the Contractor to furnish one or more competent erecting engineers.

(b) Responsibility.

(1) Erecting engineers shall:

(i) Be fluent in speaking the English language;

(ii) Supervise and be responsible for erecting, starting, and operating the equipment until field tests are completed and supervise commissioning/testing.

(iii) Fully cooperate with the erection contractor performing under other contracts; and

(iv) Coordinate work and operations with the program office and the Contracting Officer or authorized representative in charge of the erection.

(2) Erecting engineers shall not be responsible for defects in installation of the equipment due to refusal or failure of the erection contractor to follow reasonable instructions of the erecting engineer.

(c) Payment.

(1) Regular Hours. Payments made to the contractor for erecting engineer services shall:

(i) Be made at the rate offered in the Schedule of Supplies/Services per calendar day (including Saturdays, Sundays, and national legal holidays);

(ii) Be permitted if normal erection supervision is performed concurrently with the making of corrections for contractor errors.

(iii) Be made at the daily rate for a 40-hour workweek covering a 7-day period beginning with the erecting engineer's first working date at the site;

(iv) Cover services at the site of erection up to and including 40 hours per week, regardless of the hours worked per day or the days during which such services are performed;

(v) Include all costs for travel and per diem while the Contractor is at the site;

(vi) Not include travel time to and from the jobsite; and

(vii) Not be made for any period of 1 or more full calendar days which the erecting engineer spent correcting contractor errors (such corrections are the responsibility of the contractor and for payment purposes shall be deducted from the total time the erecting engineer is at the construction site).

(2) Overtime Hours. Payments made to the contractor for the overtime services of an erecting engineer shall:

(i) Be permitted only if in excess of 40 hours during a workweek as defined in subparagraph (c)(1)(iii) above;

(ii) Only be allowable if ordered by the Contracting Officer or authorized representative;

(iii) Only be paid at the overtime rate per hour offered in the Schedule of Supplies/Services for each erecting engineer; and

(iv) Be the same for all days, including Saturdays, Sundays, and national legal holidays.

(5) Acceleration of Work

Reclamation at its sole option, reserves the right to direct the Contractor to expedite the installation and testing work. The additional cost to the Contractor for expediting this work will be negotiated either prior to directly after the direction for expediting the work is given.

(6) 52.211-11 Liquidated Damages--Supplies, Services, or Research and Development (Apr 1984)

(a) If the Contractor fails to deliver the supplies or perform the services within the time specified in this contract, or any extension, the Contractor shall, in place of actual damages, pay to the Government as fixed, agreed, and liquidated damages, for each calendar day of delay the sum of \$2,500.

Provided, that the maximum total liability for liquidated damages for the delay shall not exceed \$200,000.

(b) Alternatively, if delivery or performance is so delayed, the Government may terminate this contract in whole or in part under the Termination for Cause paragraph of the Contract Terms and Conditions--Commercial Items clause in this contract and in that event, the Contractor shall be liable for fixed, agreed, and liquidated damages accruing until the time the Government may reasonably obtain delivery or performance of similar supplies or services. The liquidated damages shall be in addition to excess costs under the Termination clause.

(c) The Contractor shall not be charged with liquidated damages when the delay in delivery or performance arises out of causes beyond the control and without the fault or negligence of the Contractor as defined in the Excusable Delays paragraph of the Contract Terms and Conditions—Commercial Items clause in this contract.

(7) 1452.228-70 Liability Insurance--Department of the Interior (Jul 1996)

(a) The Contractor shall procure and maintain during the term of this contract and any extension thereof liability insurance in form satisfactory to the Contracting Officer by an insurance company which is acceptable to the Contracting Officer. The named insured parties under the policy shall be the Contractor and the United States of America. The amounts of the insurance shall be not less than as follows:

WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY

\$100,000

GENERAL LIABILITY

\$500,000 per occurrence

AUTOMOBILE LIABILITY

\$200,000 each person

\$500,000 each occurrence

\$ 20,000 property damage

(b) Each policy shall have a certificate evidencing the insurance coverage. The insurance company shall provide an endorsement to notify the Contracting Officer 30 days prior to the effective date of cancellation or termination of the policy or certificate; or modification of the policy or certificate which may adversely affect the interest of the Government in such insurance. The certificate shall identify the contract number, the name and address of the Contracting Officer, as well as the insured, the policy number and a brief description of contract services to be performed. The Contractor shall furnish the Contracting Officer with a copy of an acceptable insurance certificate prior to beginning the work.

(8) WBR 1452.201-80 Authorities and Limitations--Bureau of Reclamation (Jul 1993)

(a) All work shall be performed under the authority exercised by the Contracting Officer who has been appointed in accordance with the requirements of the Department of the Interior Acquisition Regulation (DIAR) 1401.603 (48 CFR 1401.603).

(b) The Contracting Officer may designate other Government employees to act as authorized representatives in administering this contract in accordance with the requirements of DIAR 1401.670 (48 CFR 1401.670). Any designation shall be made to the authorized representative by an appointment memorandum signed by

the Contracting Officer which contains the scope and limitations of authority delegated for purposes of administering this contract. A copy of the memorandum, and any revisions to it, shall be provided to the Contractor which shall acknowledge receipt.

(c) The Contractor shall, without unnecessary delay, comply with any written or oral direction of the Contracting Officer or authorized representative(s) acting within the scope and authority of their appointment memorandum. Such orders or direction include, but are not limited to, instructions, interpretations, approvals, or rejections associated with work under this contract including requirements for submission of technical data, shop drawings, samples, literature, plans, or other data required to be approved by the Government under this contract.

(d) (1) If the Contractor receives direction for work under this contract (including any written or oral orders it regards as a change order under the Changes clause of this contract) and it considers such direction to have been issued without proper authority (including instances where it believes delegated authority has been exceeded), it shall not proceed with the direction and shall notify the Contracting Officer within five (5) working days of receipt of the direction. On the basis of the most accurate information available to the Contractor, the notice shall state--

(i) The date, nature, and circumstances of the direction received;

(ii) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such direction;

(iii) The identification of any documents and the substance of any oral communication involved in such direction;

(iv) The contract line items or other contract requirements that may be affected by the alleged direction including any suspected delays or disruption of performance; and

(v) Any other information considered pertinent.

(2) Unless otherwise provided in this contract, the Contractor assumes all costs, risks, liabilities, and consequences of performing any work it is directed to perform under this paragraph prior to receipt of the Contracting Officer's determination issued under paragraph (e) of this clause.

(e) The Contracting Officer shall promptly, after receipt of any notice made under paragraph (d) of this clause, respond to the notice in writing. The response shall--

(1) Confirm that the direction contained in the Contractor's notice was unauthorized and either authorize it by appropriate contract modification or countermand it;

(2) Deny that the direction contained in the Contractor's notice was outside the scope and limitations of the authority of the authorized representative who gave the direction and direct the Contractor to proceed immediately with the direction received or, when necessary, direct the mode of further performance; or

(3) In the event the information contained in the Contractor's notice is inadequate to make a decision under subparagraphs (e)(1) or (2) of this clause, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.

(f) A failure of the parties to agree upon the nature of a direction, or upon the contract action to be taken with respect thereto, shall be subject to the provisions of the Disputes clause of this contract.

(9) WBR 1452.242-80 Postaward Conference -- Bureau of Reclamation (Jul 1993)

(a) Prior to the Contractor starting work, a postaward conference (as described in FAR Subpart 42.5), will be convened by the contracting activity or contract administration office. The Contractor's Project Manager shall attend the conference. If the contract involves subcontractors, a representative of each major subcontractor is also required to attend.

(b) The conference will be held at Parker Dam Powerplant, California.

(c) The Contracting Officer and the Contractor will agree to the date and time of the conference after award of the contract. In event of a conflict in schedules, the Contracting Officer shall establish the date for the conference.

(d) The Contractor shall include any associated costs for attendance at the conference in its offer.

(10) WBR 1452.223-81 Safety and Health -- Bureau of Reclamation (Jul 1998)

(a) The Contractor shall not require any laborer or mechanic employed in the performance of this contract (including subcontracts) to work under conditions which are unsanitary, hazardous, or dangerous to the employee's health or safety.

(b) In addition to the requirements of the Accident Prevention clause of this contract, the Contractor shall comply with the Bureau of Reclamation "Reclamation Safety and Health Standards" (RSHS) manual.

(c) (1) The safety and health standards as referenced in subparagraph (b)(2) of the Accident Prevention clause may be obtained from any regional or area office of the Occupational Safety and Health Administration, U.S. Department of Labor.

(2) The RSHS manual as referenced in subparagraph (b) above can be ordered from: The Government Printing Office, Superintendent of Documents, North Capitol and H St. N.W., MS-SSMC - Room 566, Washington, D.C. 20401 (Stock item GPO-024-003-00178-3). The Contractor may also obtain the RSHS manual from the Lower Colorado Regional Contracting Office for \$29 each.

(d) The Contractor shall submit a written proposed safety program in the form and time intervals prescribed in section 2 of the RSHS manual and amendments or revisions thereto in effect on the date of the solicitation.

(e) In addition to any other provisions in the contract, the Contractor shall comply with all safety and material data submittal requirements contained in the RSHS manual and revisions thereto.

(f) The Contractor shall maintain an accurate record of, and shall report to the Contracting Officer (or authorized representative) in the manner prescribed by the Contracting Officer, all cases of death, occupational diseases, or traumatic injury to employees or the public involved, and property damage in excess of \$2,500 occurring during performance of work under this contract.

(g) The rights and remedies of the Government provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

(h) In the event there is a conflict between the requirements contained in any of the safety documents referenced herein, the more stringent requirements shall prevail.

(11) 52.223-3 Hazardous Material Identification and Material Safety Data (Jan 1997)
Alternate I (Jul 1995)

(a) "Hazardous material" as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract.)

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

MATERIAL (If none, insert "None")	IDENTIFICATION NO.

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to--

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in paragraph (b) of this clause.

(1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.

(2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

(12) WBR 1452.247-900 Preparation for Shipment and Handling -- Bureau of Reclamation-Lower Colorado Region (Nov 1996)

(a) The Contractor shall prepare all materials and articles for shipment in such a manner as to protect them from damage, and shall be responsible for and make good any and all damage due to improper preparation or loading for shipment.

(b) Heavy or bulky parts or equipment shall be provided with eye bolts, lugs, or other lifting devices to facilitate handling with a crane, and, if necessary, shall be mounted on skids or crated. Where parts are boxed or crated and it is unsafe to attach slings to the box or crate, slings shall be attached to the parts and the slings shall project through the box or crate so that attachment can be readily made. Instructions for handling and lifting all parts, boxes, and crates shall be clearly painted on or attached to the part or crate. Any articles or materials that otherwise might be lost shall be boxed or bundled and plainly marked for identification. All finished ferrous surfaces shall be coated with a rust preventative compound, and all finished nonferrous metalwork and devices subject to damage shall be suitably wrapped or otherwise protected from damage during shipment.

(c) Spare parts shall be separately packaged and identified. The expiration dates on limited shelf-life items shall be clearly marked for later inventory control by the Bureau of Reclamation.

Spare parts shall be packed in moisture-tight containers or covered with moisture tight wrapping and shall be prepared for extended storage at the Bureau of Indian Affairs' (BIA) warehouse located in Parker, Arizona. Proper precautions shall be taken with all sensitive devices to prevent damage during shipment.

(13) WBR 1452.223-80 Asbestos-free Warranty -- Bureau of Reclamation (Oct 1992)

(a) The Contractor warrants that all items delivered, or work required by the contract shall be free of asbestos in any form whatsoever except for the use of asbestos cement pipe.

(b) The Contractor may request the Contracting Officer to approve an exception to this prohibition when an asbestos-free product is not available. Such requests shall be fully documented and submitted as soon as possible after the Contractor determines that an asbestos-free product is not available. Contracting Officer disapproval of a request for an exception shall be final and not subject to the Disputes clause of this contract.

(14) 1452.204-70 Release of Claims--Department of the Interior (Jul 1996)

After completion of work and prior to final payment, the Contractor shall furnish the Contracting Officer with a release of claims against the United States relating to this contract. The Release of Claims form (DI-137) shall be used for this purpose. The form provides for exception of specified claims from operation of the release.

(15) 52.246-18 Warranty of Supplies of a Complex Nature (Apr 1984)

(a) Definitions. "Acceptance," as used in this clause, means the act of an authorized representative of the Government by which the Government assumes for itself, or as an agent of another, ownership of existing and identified supplies, or approves specific services rendered, as partial or complete performance of the contract.

"Correction," as used in this clause, means the elimination of a defect.

"Supplies," as used in this clause means the end items furnished by the Contractor and related services required under this contract. The word does not include "data."

(b) Contractor's obligations. (1) The Contractor warrants that for a period of 1 year minimum, the Turbine and Generator Bearings Lubricating System and Hydrostatic Lift System Hydraulic Power Units after acceptance by the Government, will be free from defects in material and workmanship and will conform with all requirements of this contract; provided, however, that with respect to Government-furnished property, the Contractor's warranty shall extend only to its proper installation, unless the Contractor performs some modification or other work on the property, in which case the Contractor's warranty shall extend to the modification or other work.

(2) Any supplies or parts thereof corrected or furnished in replacement shall be subject to the conditions of this clause to the same extent as supplies initially delivered. This warranty shall be equal in duration to that set forth in

paragraph (b)(1) of this clause and shall run from the date of delivery of the corrected or replaced supplies.

(3) The Contractor shall not be obligated to correct or replace supplies if the facilities, tooling, drawings, or other equipment or supplies necessary to accomplish the correction or replacement have been made unavailable to the Contractor by action of the Government. In the event that correction or replacement has been directed, the Contractor shall promptly notify the Contracting Officer, in writing, of the nonavailability.

(4) The Contractor shall also prepare and furnish to the Government data and reports applicable to any correction required (including revision and updating of all affected data called for under this contract) at no increase in the contract price.

(5) When supplies are returned to the Contractor, the Contractor shall bear the transportation costs from the place of delivery specified in the contract (irrespective of the f.o.b. point or the point of acceptance) to the Contractor's plant and return.

(6) All implied warranties of merchantability and "fitness for a particular purpose" are excluded from any obligation contained in this contract.

(c) Remedies available to the Government. (1) In the event of a breach of the Contractor's warranty in paragraph (b)(1) of this clause, the Government may, at no increase in contract price--

(i) Require the Contractor, at the place of delivery specified in the contract (irrespective of the f.o.b. point or the point of acceptance) or at the Contractor's plant, to repair or replace, at the Contractor's election, defective or nonconforming supplies; or

(ii) Require the Contractor to furnish at the Contractor's plant the materials or parts and installation instructions required to successfully accomplish the correction.

(2) If the Contracting Officer does not require correction or replacement of defective or nonconforming supplies or the Contractor is not obligated to correct or replace under paragraph (b)(3) of this clause, the Government shall be entitled to an equitable reduction in the contract price.

(3) The Contracting Officer shall notify the Contractor in writing of any breach of the warranty in paragraph (b) of this clause within 30 days after discovery of the defect. The Contractor shall submit to the Contracting Officer a written recommendation within 30 days as to the corrective action required to remedy the breach. After the notice of breach, but not later than 30 days after receipt of the Contractor's recommendation for corrective action, the Contracting Officer may, in writing, direct correction or replacement as in paragraph (c)(1)

of this clause, and the Contractor shall, notwithstanding any disagreement regarding the existence of a breach of warranty, comply with this direction. If it is later determined that the Contractor did not breach the warranty in paragraph (b)(1) of this clause, the contract price will be equitably adjusted.

(4) If supplies are corrected or replaced, the period for notification of a breach of the Contractor's warranty in paragraph (c)(3) of this clause shall be 30 days from the furnishing or return by the Contractor to the Government of the corrected or replaced supplies or parts thereof, or, if correction or replacement is effected by the Contractor at a Government or other activity, for 30 days thereafter.

(5) The rights and remedies of the Government provided in this clause are in addition to and do not limit any rights afforded to the Government by any other clause of the contract.

(16) WBR 1452.232-80 Limitation of Funds (Fixed-price Contract) -- Bureau of Reclamation (Dec 1994)

(a) Pursuant to Section 12 of the Reclamation Project Act of 1939 (43 U.S.C. 388) incremental funding for this contract will be made available in accordance with this clause.

(b) Incremental funding in the amount of 10% of the total contract amount is presently available for payment and allotted under this contract for [Insert a description of work required under the contract or identify contract line items, if appropriate]. This present funding allotment is contemplated to cover the work to be performed until September 30, 1999. A schedule for anticipated future funding allotments is as follows. This information is for planning purposes only and may not be fully representative of the funds actually allotted under this contract [Insert percentage of total contract amount anticipated to be funded for each period when the clause is used in a solicitation; insert anticipated funding amounts for each period when clause is inserted in the contract]:

FISCAL YEAR	FUNDING AMOUNT
On award of contract	10%
FY 2000	90%

(c) For work identified in paragraph (b) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of specified work for the Government's convenience, approximates the total amount currently allotted to the contract. The Contractor shall not be obligated to continue performance of this work beyond that point. The Government shall not be obligated in any event to reimburse the Contractor in excess of the amount allotted to the contract for this work notwithstanding any contrary provisions of the Termination for Convenience of the Government clause of this contract.

(d) Notwithstanding the date specified in paragraph (b) of this clause, the Contractor shall notify the Contracting Officer in writing at least 60 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 75 percent of the total amount then allotted to the contract for performance of work identified in paragraph (b) of this clause. The notification shall state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the work up to the next scheduled date for allotment of funds identified in paragraph (b) of this clause, or to a mutually agreed upon substitute date. The notification shall also advise the Contracting Officer of the estimated amount of additional funds that will be required for the timely performance of work funded pursuant to this clause, for a subsequent period as may be specified in the allotment schedule in paragraph (b) of this clause, or otherwise agreed to by the parties. If after such notification additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer shall terminate any work for which additional funds have not been allotted, pursuant to the Termination for Convenience of the Government clause of this contract.

(e) When additional funds are allotted for continued performance of the work identified in paragraph (b) of this clause, the parties will agree as to the period of contract performance which will be covered by the funds. The provisions of paragraph (c) through (e) of this clause will apply in like manner to the additional allotted funds and agreed substitute date, and the contract will be modified accordingly through revision of paragraph (b) of this clause. The Contracting Officer is the only person authorized to provide notice, communication, or other form of representation to increase or decrease the amount of funds allotted by the Government to this contract.

(f) If, solely by reason of failure of the Government to allot additional funds in amounts sufficient for timely performance of the work identified in paragraph (b) of this clause, the Contractor incurs additional costs or is delayed in the performance of the work under this contract and if additional funds are allotted, an equitable adjustment will be made in the price or prices (including appropriate target, billing, and ceiling prices where applicable) of work, or in the time of delivery, or both. Failure to agree to any such equitable adjustment hereunder shall be a dispute concerning a question of fact within the meaning of the Disputes clause of this contract.

(g) The Government may at any time prior to termination allot additional funds for the performance of the work identified in paragraph (b) of this clause.

(h) The termination provisions of this clause do not limit the rights of the Government under the Default clause of this contract. The provisions of this clause are limited to the work and allotment of funds as set forth in paragraph (b) of this clause. This clause is inapplicable once the contract is fully funded except

with regard to the rights or obligations of the parties concerning equitable adjustments negotiated under paragraphs (e) or (f) of this clause.

(i) Change orders shall not be considered authorization to exceed the amount allotted by the Government as specified in paragraph (b) of this clause unless the amount is increased by inclusion of a statement contained in the change order.

(j) Nothing in this clause affects the right of the Government to terminate this contract pursuant to the Termination for Convenience of the Government clause of this contract.

3. 52.212-5 Contract Terms and Conditions Required to Implement Statutes or Executive Orders -- Commercial Items (May 1999)

(a) The Contractor agrees to comply with the following FAR clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

- (1) 52.222-3, Convict Labor (E.O. 11755); and
- (2) 52.233-3, Protest After Award (31 U.S.C 3553).

(b) The Contractor agrees to comply with the FAR clauses in this paragraph (b) which the contracting officer has indicated as being incorporated in this contract by reference to implement provisions of law or executive orders applicable to acquisitions of commercial items or components:

(Contracting Officer shall check as appropriate.)

- ☒ (1) 52.203-6, Restrictions on Subcontractor Sales to the Government, with Alternate I (41 U.S.C. 253g and 10 U.S.C. 2402).
- ☐ (2) 52.219-3, Notice of Total HUBZone Small Business Set-Aside (Jan 1999)
- ☐ (3) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (Jan 1999) (if the offeror elects to waive the preference, it shall so indicate in its offer).
- ☐ (4)(i) 52.219-5, Very Small Business Set-Aside (Mar 1999) (Pub. L. 103-403, section 304, Small Business Reauthorization and Amendments Act of 1994).
- ☐ (ii) Alternate I to 52.219-5.
- ☐ (iii) Alternate III to 52.219-5.
- ☒ (5) 52.219-8, Utilization of Small Business Concerns (15 U.S.C. 637 (d) (2) and (3));
- ☐ (6) 52.219-9, Small Business Subcontracting Plan (15 U.S.C. 637 (d)(4));
- ☒ (7) 52.219-14, Limitations on Subcontracting (15 U.S.C. 637(a)(14)).
- ☐ (8)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).
- ☐ (ii) Alternate I of 52.219-23.
- ☐ (9) 52.219-25, Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

- _____ (10) 52.219-26, Small Disadvantaged Business Participation Program--Incentive Subcontracting (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
- _____/_____/ (11) 52.222-21, Prohibition of Segregated Facilities (Feb 1999).
- _____/_____/ (12) 52.222-26, Equal Opportunity (E.O. 11246).
- _____/_____/ (13) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212).
- _____/_____/ (14) 52.222-36, Affirmative Action for Workers With Disabilities (29 U.S.C. 793).
- _____/_____/ (15) 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212).
- _____/_____/ (16) 52.225-3, Buy American Act--Supplies (41 U.S.C. 10).
- _____/_____/ (17) 52.225-9, Buy American Act--Trade Agreements Act--Balance of Payments Program (41 U.S.C. 10, 19 U.S.C. 2501-2582).
- _____ (18) [Reserved]
- _____ (19) 52.225-18, European Union Sanction for End Products (E.O. 12849).
- _____ (20) 52.225-19, European Union Sanction for Services (E.O. 12849).
- _____ (21)(i) 52.225-21, Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program (41 U.S.C. 10, Pub. L. 103-87).
- _____ (21)(ii) Alternate I of 52.225-21.
- _____ (22) 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration (31 U.S.C. 3332).
- _____/_____/ (23) 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration (31 U.S.C. 3332).
- _____ (24) 52.232-36, Payment by Third Party (31 U.S.C. 3332).
- _____ (25) 52.239-1, Privacy or Security Safeguards (5 U.S.C. 552a).
- _____/_____/ (26) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (46 U.S.C. 1241).

(c) The Contractor agrees to comply with the FAR clauses in this paragraph (c), applicable to commercial services, which the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or executive orders applicable to acquisitions of commercial items or components:

(Contracting Officer check as appropriate.)

- _____ (1) 52.222-41, Service Contract Act of 1965, As amended (41 U.S.C. 351, et seq.).
- _____ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
- _____ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act--Price Adjustment (Multiple Year and Option Contracts) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
- _____ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act--Price Adjustment (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
- _____ (5) 52.222-47, SCA Minimum Wages and Fringe Benefits Applicable to Successor Contract Pursuant to Predecessor Contractor Collective Bargaining Agreement (CBA) (41 U.S.C. 351, et seq.).

(d) Comptroller General Examination of Record. The Contractor agrees to comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in

excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records--Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c) or (d) of this clause, the Contractor is not required to include any FAR clause, other than those listed below (and as may be required by an addenda to this paragraph to establish the reasonableness of prices under Part 15), in a subcontract for commercial items or commercial components--

(1) 52.222-26, Equal Opportunity (E.O. 11246);

(2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212);

(3) 52.222-36, Affirmative Action for Handicapped Workers With Disabilities (29 U.S.C. 793); and

(4) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (46 U.S.C. 1241) (flow down not required for subcontracts awarded beginning May 1, 1996).

PART II STATEMENT OF WORK

PART 1 - GENERAL REQUIREMENTS

1.01 The Requirement

a. General. - The Contractor shall design, furnish and install three new hydraulic power units for the turbine and generator bearing lubrication system in accordance with the drawings and these specifications. Each hydraulic power unit shall consist of a high pressure hydrostatic lift system and a low pressure lubricating system. All components for each system shall be installed on one reservoir. The Contractor shall furnish all the components for the high pressure pumping unit including the reservoirs and support frames. The Government shall furnish all the low pressure pumping units and associated equipment from the existing hydraulic power units for installation by the Contractor.

1.02 Description of Work

a. General. - The principle components of the work to be performed under these specifications include the following:

(1) Visit the jobsite. - The Contractor shall visit the jobsite before proceeding with design and fabrication of the hydraulic power units. The Contractor shall: measure the as-built dimensions of the existing hydraulic power units; verify existing pipe sizes, location, routing, and configuration of equipment and piping; identify areas of potential interference; and obtain all other dimensions and information necessary to assure proper design, fabrication and installation of the equipment, piping and accessories with minimal modifications to the existing installation. The Contractor shall use the existing hydraulic power units to make templates or prepare drawings for locating all openings and installing all fittings required for the Government-furnished equipment. The Contractor shall connect the low pressure equipment to the existing bearing lubricating piping as shown on the drawings.

(2) Design the hydraulic power unit.

(3) Furnish and install the hydraulic power units. The Contractor shall coordinate the electrical requirements for the motor starter and electric power and controls with the Contracting Officer's Representative to insure proper sizing and operation of equipment.

(4) Install the Government-furnished components for the low pressure components of the turbine and guide bearing lubricating system on the new reservoirs. These components are shown on drawing 1 (1117-D-1946) and identified on Airline Hydraulics Corporation drawings A-3389 Rev A Sheets 1 of 3 and 3 of 3.

(5) Complete the connection between the hydraulic power units furnished under these specifications and the hydrostatic lift taps on the existing turbine and generator guide bearings.

(6) Test the hydraulic power units.

(7) The Contractor shall provide all materials, equipment, and tools necessary to install and test the hydraulic power units.

1.03 Submittal Requirements

The Contractor shall make timely submittals to the Government in accordance with this paragraph, Table 1.03-1 (List of Submittals), and all other requirements in the provisions of FAR (Federal Acquisitions Regulations) clauses, and paragraphs of these specifications.

The word "submittals" shall be interpreted to include drawings, data, manuals, certifications, test reports, curves, samples, brochures, and other items furnished by the Contractor for approval, information, or other purposes.

The time required for review of each submittal or resubmittal furnished under an RSN for approval will not begin until the Government receives complete sets of all the submittal materials required for that particular RSN, if necessary for informational continuity. The number of calendar days required for review of drawings or data submitted or resubmitted for approval will include the date the drawings or data are received by the Government, and will extend through the date of return mailing to the Contractor. Except as otherwise provided in these specifications, the Government will require 20 calendar days for review of each submittal or resubmittal furnished by the Contractor for approval. This review time will apply to each separate submittal or resubmittal whether the submittals are approved, not approved, or otherwise returned for revision.

If the Government uses time in excess of the specified number of calendar days for review of any submittal or resubmittal, additional time, not to exceed the excess time, will be added to the time allowed the Contractor for delivery of the materials or equipment affected by such excess time, to the extent it is demonstrated that the excess time caused delay. If the Government's review of two or more separate submittals or resubmittals is late and results in concurrent days of excess time, such days will be counted only once in computing an extension of the delivery date. Further, if the Contractor fails to make complete approval submittals in the sequence and within the time periods specified in these specifications, and thus precludes the Government from approving or considering for approval such submittals within the specified calendar day period, then the Contractor shall not be entitled to an extension of time allowed for delivery of the materials or completion of work.

One set of the submittals required for approval will be returned to the Contractor either approved, not approved, or approved with comments, and will be marked to indicate changes if required. Submittals which are not approved or which require changes or revisions, shall be revised and resubmitted for approval, and shall show changes and revisions with revision date. All requirements specified for the initial submittal shall apply to any resubmittals required. All submittals which are to be resubmitted shall be resubmitted by the Contractor within 20 calendar days after the Contractor has received the Government's review comments.

Table 1.03-1 (List of Submittals) lists the submittals required by these specifications except those submittals which are required conditionally, required by entities other than the Federal Government, or which are periodic in nature. Any submittal required to be submitted by the

Contractor, which is not listed in the table, shall be submitted in accordance with the applicable requirements elsewhere in these specifications. In case of a conflict between the requirements of this paragraph and the requirements included elsewhere in these specifications, the requirements elsewhere shall take precedence over the requirements contained in this paragraph.

Each item in table 1.03-1 (List of Submittals) has been assigned an RSN (Required Submittal Number). The "Submittals required" column of the table specifies the material to be submitted for each RSN. All of the submittal items specified for an RSN will be considered a complete set.

Where the submittals required for an RSN are specified as separate or distinguishable parts, a complete set shall include all parts. Only complete sets shall be submitted whenever possible. As an option, the Contractor may submit materials required for more than one RSN with the same submittal cover letter, provided that they are required by the same responsible code.

The Contractor's submittal cover letter shall include:

1. Reference to the Government contract number.
2. Identification of responsible code for each RSN as listed in Table 1.03-1 (List of Submittals).
3. Complete list of RSN(s) for which material is being submitted.
4. List of materials being submitted for each RSN.
5. Identification of the submittal as an original submittal or resubmittal.

The number of complete sets to be submitted, and the location to which they are to be sent, shall be in accordance with the "No. of sets to be sent to:" column of the table, except as provided below for sets of original material.

When an RSN involves submittal of original (non-copied) material, all original material, or as much thereof as is necessary to form a complete set, shall be included in just one complete set. This "originals" set shall be sent to the proper address as determined by the "Responsible code" column of the table and the following:

1. CO indicates Contracting Officer.
2. RE indicates Regional Engineer.
3. TSC indicates Denver Office

The "originals" set shall be counted as one of the complete sets required to be submitted under the "No. of sets to be sent to:" column of the table.

Each drawing submitted by the Contractor shall have the Contractor's or supplier's title and drawing number on it. The drawings and data shall be labeled with the Government's contract/specifications numbers and the bidding schedule item number.

Manufacturer's data for commercial products or equipment, such as catalog cut sheets, shall be clearly marked to indicate the item(s) to be furnished. The data shall be sufficiently comprehensive to identify the manufacturer's name, product or equipment type, model, size, and characteristics. They shall completely demonstrate that the product or equipment meets the requirements of these specifications. Submittals requiring certification by registered professionals shall be signed and sealed.

The Contractor shall send the submittals to the applicable addresses listed below as required by table 1.03-1 (List of Submittals).

The Contractor shall also send a copy of the transmittal letter to each of the addresses listed below that are not receiving the complete submittal for a specific RSN.

Submittals shall be sent as required by table 1.03-1 (List of Submittals) to:

1. Contracting Officer, Attention: LC-3113, Bureau of Reclamation, PO Box 61470, Boulder City NV 89006-1470
2. Regional Engineer, Attention: LC-6000, Bureau of Reclamation, PO Box 61470, Boulder City NV 89006-1470
3. Denver Office, mail to: Bureau of Reclamation, Attention D-8410, PO Box 25007, Denver, Colorado 80225-0007

Table 1.03-1 - List of submittals

RSN	Item	Reference provision, clause, or paragraph	Responsible code	Submittal items	No. of sets to be sent to:*			Due date or delivery time
					C0	RE	TSC	
C1	Safety Program	WBR 1452.223-81	RE	Safety Program	0	1	0	Prior to beginning work onsite
C2	Warranty	52.246-18	CO	Warranty of Complex Items	1	1	1	Prior to final payment
C3	Liability Insurance	1452-228-70	CO	Acceptable evidence showing the insurance has been obtained	1	0	0	Prior to commencement of work onsite
C4	Hazardous Material	52.223-3	RE	Material Safety Data Sheets	0	2	0	Prior to bringing materials onsite

RSN	Item	Reference provision, clause, or paragraph	Responsible code	Submittal items	No. of sets to be sent to:*			Due date or delivery time
					C0	RE	TSC	
C5	EFT Information	52.232.34	CO	ACH Form	1	0	0	At least 14 days prior to submission of 1 st invoice
C6	Release of Claims	1452-204-70	CO	Release of Claims	1	0	0	After completion of work and prior to final invoice
M1	High Pressure Lube Oil Systems	1.04.c.(1) and 3.01.b.	D-8410	Approval Drawings and Data (1) Calculations (2) Procedures (3) Assumptions (4) References	0	2	3	20 days after notice to proceed is received
M2	Hydraulic Power Units	1.04.d.(1) and 3.02.b.(1)	D-8410	(1) Approval Drawings and Data (a) Commercial Products (b) Hydraulic Reservoir Drawings (c) Frame Drawings (d) Hydraulic Power Unit Drawings (e) Electrical Requirements	0	2	3	20 days after notice to proceed is received
M3	Hydraulic Power Units	1.04.e. and 3.02.b.(2)	D-8410	(2) Final Drawings and Data (a) As-built Drawings (b) Service Manuals	0	2	3	20 days after notice to proceed is received
M4	Hydraulic Power Units	1.04.f., 3.02.e. and 3.02.h.	D-8410	Test Reports (1) Shop Tests (2) Field Tests and Certification	0	2	3	2 weeks after tests completed

*RE indicates Regional Engineer, Boulder City NV; CO indicates Contracting Officer, Boulder City NV; and TSC indicates Technical Service Center, Denver. For mailing addresses, see subparagraph entitled "Addresses" of paragraph 1.03 entitled "Submittal Requirements."

1.04 Drawings and Data to Be Furnished by the Contractor

a. General. - All drawings and data shall be in accordance with this paragraph; paragraph 1.03 (Submittal Requirements); and the applicable equipment and/or materials paragraphs. All drawings and data shall be written in English, shall be made expressly for this contract (typical drawings will not be acceptable), shall be complete and accurate in their content, and shall be legible. Freehand sketches will not be accepted. Where feasible, all outline assembly and detail drawings shall be made to scale. When a scale is used to make a drawing, it shall be an engineer's or architect's scale with its graduations conforming to the United States of America foot and inch system. The scale used shall be indicated on the drawings.

The Government reserves the right to require the Contractor to make any changes in the equipment design and drawings which may be necessary to make the equipment and drawings conform to the requirements of these specifications, without additional cost to the Government.

When revised drawings are resubmitted, the changes from the previous submittal shall be clearly identified on the drawings. The submittal letters shall describe the reasons for significant changes.

After the approval drawings and data have been submitted and returned approved, with or without comments, the Contractor shall make no further changes to the design without the approval of the Contracting Officer. All of the approval drawings shall be submitted promptly. The time required for return of the approval drawings will start with the date of receipt of the last required approval drawings and data.

b. References:

ANSI B93.18 - 87 - (American National Standards Institute) Non-Integral Industrial Fluid Power Hydraulic Reservoirs

ASME B1.20.3 - 1991 (American Society of Mechanical Engineers) Dryseal Pipe Threads

ASME B40.1 - 1991 (American Society of Mechanical Engineers) Gauges - Pressure Indicating Dial Type

ASTM A 240/A 240M-98a - (American Society for Testing Materials) Standard for Heat-Resisting Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure vessels.

ASTM A 276-98a - (American Society for Testing Materials) Standard Specification for Stainless Steel Bars and Shapes.

SAE J 514 - 1996 - (Society of Automotive Engineers) Hydraulic Tube Fittings

c. Approval drawings and data. - Within 20 calendar days after date of receipt of notice to proceed with the contract and before beginning with factory fabrication, the Contractor shall submit to the Government for approval, a total of five sets of all drawings and data listed below.

(1) Approval data. - Complete, checked and dated: calculations, procedures, assumptions, and references used to determine the flow, pressure, verify the heat exchanger requirements, and size of the hydraulic power units and associated equipment for each bearing.

If revised drawings are submitted for approval, the changes from the previous submittals shall be clearly identified on the drawings, with every revision made during the life of the contract shown by number, date, and subject in a revision block, and a notation shall be in the drawing margin to permit rapid location of the revision. The drawings shall be clear and legible in all respects.

The Contracting Officer shall have the right to require the Contractor to make any changes in the equipment design which may be necessary, in the opinion of the Contracting Officer, to make the equipment conform to the requirements of these specifications, without additional cost to the Government.

Approval by the Contracting Officer of the Contractor's drawings shall not be held to relieve the Contractor of any part of his responsibility to meet all of the requirements of these specifications or for the correctness of his drawings. Any manufacturing done or shipment made before approval of the drawings will be at the Contractor's risk.

Drawings shall be ANSI size D (22 inches in height, 34 inches in width).

A narrative index list shall be furnished by the Contractor indicating Contractor's drawing number and drawing title. The narrative index list shall be identified by solicitation/specifications numbers and project.

d. - Hydraulic Power Unit Design Data. - After the design of the hydraulic power units has been completed, but in any event within 20 calendar days after receipt of notice to proceed with the contract, the Contractor shall furnish a total of five copies of the following calculated data regarding the hydraulic power units.

(1) Approval data:

(a) Commercial products data: application and complete performance data showing rated capacities, pressures and temperatures, leakage rates, compliance with applicable industry codes and standards; physical characteristics showing dimensions, weights, construction materials, accessories, required clearances.

(b) Drawing showing fully dimensioned hydraulic reservoir. Identifying size and purpose of all openings and fittings.

(c) Drawing showing fully dimensioned support frame including sizes of all members and bill of materials.

(d) Drawing showing fully assembled hydraulic power unit including bill of materials and high pressure side hydraulic schematic.

(e) Electrical requirements: Complete motor data sheets with all information as shown on drawing 40-D-6032; wiring diagrams and bill of materials.

e. - Final drawings, data and service manuals. - The Contractor shall furnish one complete set of final as-built drawings and computer files on 3.5-inch floppy disk or CD-ROM in AutoCAD (DWG) format, Drawing Transfer Format (DXF), or Initial Graphics Exchange Specification (IGES) format. All revisions shall be indicated in dated and signed or initialed revision blocks.

(1) As-built drawings shall show all changes and revisions, with revision dates, made up to the time the equipment is completed and ready for shipment.

(2) Service manuals shall contain complete parts identification lists; lists of special tools, and accessories for pumps; and detailed instructions for the installation, operation, lubrication, winterizing procedures, and maintenance of the equipment; and shall be in tabular form.

Submit a total of five sets of the following data:

(a) As-built drawing showing the fully assembled hydraulic power unit with high pressure and low pressure components.

(b) Service manuals for the high pressure side of the hydraulic power unit. Manuals shall include copies of all previously approved data and drawings.

f. - Shop test reports. - Within 2 weeks after completion of the shop tests, the contractor shall submit a report containing verification that the unit does not leak, the unit will deliver oil at each of the outlet ports in the quantity and at the pressure specified. The Contractor shall furnish a total of five certified copies of all test reports, data, etc.

Field test report and certification. - Within 2 weeks after completion of the field tests, the contractor shall submit a report containing the test procedures, processes followed, results of each valve setting and modes, list pressure settings, list any adjustments made, list settings of all valves and switches and certification in writing and on company letterhead that the equipment is fully serviced, checked, tested, adjusted and ready for operation. The Contractor shall furnish a total of five certified copies of all test reports, data, etc.

g. Payment. - Payment for the items submittals listed in this subparagraph 1.04 (Drawings and Data to Be Furnished by the Contractor) shall be made at the lump-sum prices bid therefore in the schedule and corresponding to paragraphs 3.01 (Design) and 3.02 (Hydraulic Power Unit).

PART 2 - MATERIALS AND WORKMANSHIP**2.01 Materials and Workmanship**

Unless otherwise stated in these specifications, materials used in the manufacture of the equipment shall be new and of the highest standard commercial quality as normally used for this type of equipment, and free of defects, considering strength, ductility, durability, best engineering practice, and the purpose for which the equipment is to be used.

Liberal factors of safety, which will assure durability and a reasonable life expectancy for all new components, shall be used throughout the design and especially in the design of all parts subject to cyclic stress or shock. For all new parts of the equipment, the maximum stress in the materials shall not exceed one-third of the yield strength nor one-fourth of the ultimate tensile strength when subjected to maximum normal operating conditions.

2.02 Work and Materials to Be Furnished by the Government

a. The Government will provide, without cost to the Contractor, the following labor, materials and storage, and perform the following work:

1. Furnish the cranes and crane operator as necessary when moving materials into and out of the powerplant.

The Government-operated cranes will be available for the Contractor's use based on the following backcharge. If a conflict exists, the Government will determine the necessary priorities. The crane and operator will cost the Contractor \$40 per hour (including standby) when there is notification of the need more than 48 hours prior to use. If notification is less than 48 hours, the rate will be \$60 per hour. Any labor, including rigging and rigger, other than the crane operator, required to handle the equipment, materials or supplies, shall be furnished by the Contractor.

2. Furnish alternating-current electrical energy at 480 volts, 60 amperes, three-phase as required by the Contractor. The Contractor shall supply all equipment for connecting to this power supply.

3. Furnish alternating-current electrical energy at 120 volts, 15 amperes, single-phase as required by the Contractor for lighting and power tools.

4. Water can be furnished from service outlets. The Contractor shall furnish and install, at the Contractor's own expense, any additional pipelines, connections, and appurtenances required by the Contractor for the Contractor's own use or convenience in performing the work. The Contractor shall remove all such additional pipelines, connections, and appurtenances upon completion of the work. No waste of Government-furnished water will be permitted.

5. In the event storage is required for any lube oil system materials prior to their installation, such storage shall be at the risk of and at the expense of the Contractor. The Government will, however, cooperate in providing without charge to the Contractor such

inside or outside temporary project storage space as might be available for such purpose. Inside storage space is available at Parker Dam warehouse 15 miles from Headgate Rock.

2.03 Work and Materials to Be Furnished by the Contractor

a. Except as otherwise provided in the previous paragraphs, the Contractor shall furnish all labor, materials, equipment, instruments, and tools required in connection with the manufacture, installation, and testing of the hydraulic power units. The Contractor shall also furnish all labor for proper disposal of existing hydraulic power units from the jobsite, including transportation. Labor for testing shall include all labor except that furnished by the Government in conjunction with the field tests. Accordingly, labor for testing shall include all major piping connections involving the hydraulic power units and their interface to the existing equipment/system.

1. The contractor shall be responsible for all transportation, housing costs and subsistence expenses of its personnel.
2. The Contractor shall bear all costs of loading, transporting, unloading and handling all required materials from the Contractor's shipping point or points to the point of storage at the powerhouse. The Contractor shall also bear all costs of transporting test instruments and equipment to and from the jobsite.
3. The Contractor shall be responsible for all materials requiring special storage conditions, including controlling temperature, humidity, dust, or any other atmospheric conditions that are not a normal condition at the powerplant. The Contractor shall advise the Government of all materials which have a limited shelf life and which the Contractor recommends to be shipped immediately prior to installation. All hazardous materials shall be plainly identified as such on the container along with a label stating the contents, handling, and first-aid treatment. The Contractor shall also provide a storage cabinet or other suitable facilities for storing flammable or toxic materials.
4. Furnish scaffolding and work platforms as required.
5. Furnish fire protection for work area.
6. Furnish personal safety equipment, hard hats, safety glasses, hearing protection, respirators, first aid supplies, etc., for its employees.
7. Furnish wire ropes and slings for removal and installation of any portions of the lube oil system as necessary.
8. Provide local (in the immediate work areas) approved flammable liquid storage cabinets to be used for the storage of solvents, resins, and other flammable liquids.
9. Conduct a safety inspection after each final shift for fire hazards, unnecessary energized equipment, and materials, boxes, etc. which may block access.

10. Each shift shall check in and out of the control room upon arrival/departure to/from the project.

11. The Contractor shall provide an On-Site Technical Supervisor who shall provide technical direction to the installation crews. This shall include but not be limited to training of special procedures which may be required to install lube oil systems, inspection of the work to ensure that the drawings and installation procedures are being followed and quality assurance of the work, progress reports, general planning and layout of the work performance evaluation of the installation crews, and training of necessary safety procedures. The On-Site Technical Supervisor shall be present at the site at all times when work is in progress or must be available within four hours of the Government's request. The Government shall have the right to require the Contractor to replace any On-Site Technical Supervisor who fails to comply with Contract Document requirements.

PART 3 - HYDRAULIC POWER UNIT**3.01 - Design**

a. General. - The Contractor shall design the high pressure side of the hydraulic power units to provide the required flow and pressure for hydrostatic lifting of the guide bearing loads shown on the turbine and generator bearing data sheets.

b. Submittal data. - All data shall be in English units. The Contractor shall submit a total of 5 sets of the following data:

(1) Approval data. - Complete, checked and dated: calculations, procedures, assumptions, and references used to determine the flow, pressure, verify the heat exchanger requirements, and size of the hydraulic power units and associated equipment for each bearing. The calculations shall be the product of a professional engineer regularly engaged in the design of hydraulic power units, and shall be certified by a currently registered Professional Engineer stamp.

Submittals - Submittals shall be in accordance with this subparagraph, paragraph 1.03 (Submittal Requirements) and 1.04 (Drawings and Data to be Furnished by the Contractor).

c. Lift pressures and lift flows. - The pressure and flow requirements for hydrostatic lift at each guide bearing shall be in accordance with the following:

(1) Generator guide bearings. - The flow and pressure required to sustain hydrostatic lift, and the recommended minimum pump pressure for the generator guide bearings are shown on the generator manufacturer's engineering data sheets shown on drawing 2 (1117-D-1947). The generator guide bearing is shown on drawings 18 (063-000-160) and 19 (000-303-174). The combined generator guide and thrust bearing are shown on 20 (061-000-085) and the guide bearing details are shown on drawing 21 (000-303-186). The oil pressure in the inlet line shall be sufficient to maintain the necessary flow. The operation and maintenance manuals for the turbines state that hydrostatic lift line will be about 1750 PSI after lift-off.

(2) Turbine guide bearing. - The recommended hydrostatic lift pressure for the turbine guide bearing is shown on the turbine manufacturer's journal guide bearing data turbine specifications sheet shown on drawing 2 (1117-D-1947). The Contractor shall determine the flow requirements for the turbine guide bearing and verify the required pump pressure. The turbine guide bearing is shown on drawing 17 (126-56042-0002 F).

d. Hydraulic power unit sizing. - The high pressure pump for hydraulic power unit shall be sized for the total flow and maximum pressure required to sustain lifting loads. The Contractor shall design the high pressure side of the hydraulic power unit to sustain the required hydrostatic lift pressure and flow at each bearing until the turbine/generating unit attains the speed required to achieve hydrodynamic flow.

e. Heat exchanger. - The high pressure pump is expected to operate approximately 5 minutes on turbine startup. The Contractor shall verify the oil cooling requirements and shall size, furnish and install a heat exchanger if necessary. If a heat exchanger is required, the Contractor shall obtain a water quality report from the Contracting Officer's Representative before proceeding with sizing and selecting materials for the heat exchanger.

f. Arrangement - The hydraulic power units shall be arranged and built to fit the limited space as shown on the drawing. The suction filter shall be located on the outside of the reservoir. The pressure filter shall be located so it is readily accessible for maintenance. All adjusting screws shall be readily accessible and the pressure gauge and pressure switch shall be located for easy viewing. Hydraulic fluid lines, fittings, and hydraulic components shall have a staggered configuration within the hydraulic power unit so that removal of any one component can be accomplished without removing any other component.

3.02 - Hydraulic Power Unit

a. General. - Each hydraulic power unit shall be furnished complete with: stainless steel reservoirs and stainless steel mounting frame; high pressure pumping unit including motor and motor control equipment; remote mounted control panel; relief valves, flow control valves, pressure control valves, isolating valves; flow dividers; filters and strainers; tubing; piping; pressure gauges and pressure switches; and all other accessories required for a complete high pressure lift system ready for operation.

b. Submittal data - The Contractor shall submit a total of 5 sets of data in accordance with the following:

(1) Approval data:

(a) Commercial products data: application and complete performance data showing rated capacities, pressures and temperatures, leakage rates, compliance with applicable industry codes and standards; physical characteristics showing dimensions, weights, construction materials, accessories, required clearances;

(b) Drawing showing fully dimensioned hydraulic reservoir. Identifying size and purpose of all openings and fittings.

(c) Drawing showing fully dimensioned support frame including sizes of all members and bill of materials.

(d) Drawing showing fully assembled hydraulic power unit including bill of materials and high pressure side hydraulic schematic.

(e) Electrical requirements: Complete motor data sheets with all information as shown on drawing 40-D-6032; wiring diagrams and bill of materials.

Submittals - Submittals shall be in accordance with this subparagraph, paragraph 1.03 (Submittal Requirements) and 1.04 (Drawings and Data to be Furnished by the Contractor).

(2) Final as-built drawings, data and service manuals. - As-built drawings shall show all changes and revisions, with revision dates, made up to the time the equipment is completed and ready for shipment. The Contractor shall furnish the final drawings as a full size print and on a 3-1/2 inch diskette in AUTOCAD (DWG) format, Drawing Transfer Format (DXF), or Initial Graphics Exchange Specification (IGES) format

Service manuals shall contain complete parts identification lists; lists of special tools, and accessories for pumps; and detailed instructions for the installation, operation, lubrication, winterizing procedures, and maintenance of the equipment; and shall be in tabular form.

Submit a total of five sets of the following data:

(a) As-built drawing showing the fully assembled hydraulic power unit with high pressure and low pressure components.

(b) Service manuals for the high pressure side of the hydraulic power unit. Manuals shall include copies of all previously approved data and drawings.

Submittals - Submittals shall be in accordance with this subparagraph, paragraph 1.03 (Submittal Requirements) and 1.04 (Drawings and Data to be Furnished by the Contractor).

c. Materials. - All materials shall be new and shall be the product of manufacturers regularly engaged in the production of equipment suitable for use with high pressure hydraulic systems. All materials shall be manufactured and rated in accordance with recognized industry standards. All products shall be suitable for the intended application. Materials for the hydraulic power unit shall conform to the following:

(1) Pump. - The oil pump shall be have the following salient characteristics:

The oil pump shall be the fixed-displacement, high pressure type having a flange suitable for mounting on the electric motor or separately mounted on a motor and pump mounting plate. A coupling guard shall be provided when a flexible coupling is used. The pump capacity and working pressure shall be as determined by the contractor for the intended application based on the drawings and data provided in these specifications. Maximum speed shall not exceed 1,800 revolutions per minute. The pump shaft shall be provided with suitable bearings and shall be adequately packed or sealed to prevent leakage.

Provide one set of the pump manufacturer's recommended spare parts for each pump.

(2) Induction motor for oil pump. - The induction motor shall have the following salient characteristics:

(a) General. - The motor furnished shall be designed for the duties specified, shall be of the squirrel-cage induction type, and shall conform to NEMA publication No. MG1 including characteristics, tests, and ratings, unless otherwise specified.

The motor shall be totally enclosed, fan cooled. The motor shall be furnished with a breather and a drainplug in its enclosure. The drainplug shall be so located that it will be accessible to permit complete draining of any water that may accumulate in the motor housing.

The motor shall be designed for across-the-line starting, at full voltage. The Contractor shall coordinate the motor characteristic and torque requirements of the load so that proper operation of the hydraulic power unit will be obtained during the sequence of starting, accelerating, and normal running. The motor shall be rated three phase, 60 hertz, 460 volts AC.

The horsepower rating of the motor shall be such that it will carry continuously the maximum possible load developed under all operating conditions specified, without exceeding the nameplate rating and without benefit of a service factor.

The motor will be operated in an ambient air temperature of 7 to 40EC and at an elevation of 300 feet above sea level. The maximum temperature rise of the windings when the motor is delivering rated output continuously at rated voltage and frequency shall not exceed 80EC by resistance for class B, F, or H insulation. The temperature rise of other parts of the motor shall be in accordance with the standards for class B insulation.

(b) Motor efficiency. - The motor efficiency stated on drawing 7 (40-D-6032) shall allow for windage, friction, open-circuit core losses, stray-load losses, and I^2R losses in the stator elevation and rotor at the temperature of 75 EC as obtained in the manner specified in the standards.

(c) Stator. - The motor winding leads shall be brought out of the stator frame to the terminal box and each lead shall terminate in a solderless connector. The winding lead insulation shall be completely sealed so that it is equal to the winding coil insulation in regard to resistance to moisture and voltage class. The connection in the terminal box to external leads shall be tapped.

The windings shall be insulated with class B, F, or H insulation. The insulation shall be treated so as to prevent damage from temporary exposure to dampness.

The rotor structure shall be built up in accordance with modern practice and provided with squirrel-cage windings of suitable resistance for starting the motor and its load with the required starting voltage.

(d) Bearings. - The motor shall be equipped with bearings that are designed for the specific duty herein. The bearings shall be oil or grease lubricated. The bearings shall be sealed against loss of the lubricant or entrance of dirt. Each bearing shall be insulated to prevent circulating currents from passing through the bearing surfaces. The bearing insulation may be omitted provided the induced shaft voltages are sufficiently low so that current will not flow through the bearing lubricating film from one bearing surface to another.

(3) Oil reservoir. - Unless otherwise indicated, the reservoir shall conform to the general requirements of ANSI B93.18. The reservoir shall have a capacity of approximately 500 gallons including an air space equal to 10 percent of tank volume between the maximum oil level and the top of the reservoir. The reservoir shall be complete with: clean out doors on each end, slope to drain plug at low end; minimum of one interior baffle separating the oil return side from the pump suction side; high-strength permanent magnetic separator. The top plate shall be sized to adequately support the imposed loads due to the high pressure pumping unit and the Government-furnished equipment. In addition to the fittings required for the high pressure pumping unit and associated components the reservoir shall be equipped with the required fittings for installing the Government-furnished equipment. The reservoir and any internal piping and fittings shall be constructed of stainless steel, ASTM A276 type 304, and shall be built for mounting on the support frame. A baffle shall be provided between the pump suction and return lines. The fittings for the oil-level sight gauge shall be mounted on the front side of the reservoir.

(4) Support frame. - The support frame shall be stainless steel, ASTM A276 type 304, designed in accordance with AISI. The support frame shall be provided with pre-drilled connections for field assembly in the turbine pit where shown on the drawings. Hardware for connecting frame members shall be in accordance with AISI. Removable lifting brackets shall provided as shown on the drawings.

(5) Suction oil filter. - The suction filter shall have the following salient characteristics:

The suction oil filter shall be of the removable filter-element type. It shall filter all the oil passing through the line. The filter shall have a visual indicator to show when the element needs cleaning and an automatic bypass that limits the pressure drop through the filter to not more than 2 pounds per square inch. The filtering media shall be a corrosion-resistant No. 100-mesh or finer wire cloth. The filter shall have a nominal flow rating of not less than 2 times the maximum single pump capacity when filtering oil with a viscosity of ISO VG68 (340 SSU) at 38EC. Three spare filtering elements shall be provided. The top of the filter housing shall be equipped with an air vent valve.

(6) Pressure oil filter. - The pressure filters shall have the following salient characteristics:

The pressure oil filter shall be the high pressure, removable filter-element type capable of withstanding a working pressure equal to the pump pressure with a filter element capable of removing particles as small as 10 microns in size. The filter shall

have a visual indicator to show when servicing is required and shall contain a pressure-actuated bypass valve connected in parallel with the full-flow filter, to limit the pressure drop across the filter to 25 pounds per square inch maximum, either during cold startup, or as a result of contamination buildup. The filter shall be rated for passing not less than the maximum combined pump capacity while filtering lubricating oil with a viscosity of ISO VG68 (340 SSU at 38EC). Six spare filter elements shall be furnished.

(7) Relief valve. - The relief valve shall have the following salient characteristics:

The relief valve shall be a pilot type with an internal drain. It shall have a rated capacity of not less than the maximum combined pump capacity and working pressure rating. Valves shall be 316 stainless steel. The valve setting shall be adjustable through a pressure range with the lower limit not higher than 500 pounds per square inch and the upper limit not lower than 3,500 pounds per square inch.

(8) Flow control valves. - The flow control valves shall have the following salient characteristics:

The flow control valves shall be needle, flow dividing type, capable of being adjusted to pass the gallons per minute required. Valves shall be 316 stainless steel.

(9) Pressure gauge. - The pressure gauge shall have the following salient characteristics:

Pressure gauges shall conform to ASME B40.1. The oil-pressure gauge shall be a type suitable for oil which uses a Bourdon tube to operate a rustproof and corrosion-resistant movement. The gauge shall: have a range of twice the hydraulic system working pressure; have an accuracy of one-half of 1 percent over the entire scale of the dial; be the safety type; and be provided with an approved gauge snubber and a shut-off isolation valve. The dial shall have a diameter of approximately 4 inches.

(10) Check valve - Check valves shall have the following salient characteristics:

Check valves shall be the in-line type. The check valve shall have a minimum rated capacity equal to the pump capacity and a working pressure not less than that required by the system design. Valves shall be 316 stainless steel.

(11) Pressure switch. - The pressure switch shall have the following salient characteristics:

The oil-pressure switch shall be a type, suitable for lubricating oil, which uses a direct-acting sealed piston or a Bourdon tube to operate a mercury or snap-action switch having a rating of at least 10 amperes at 120 volts AC. The switch shall have independent outside adjustments with locking devices for setting the cut-in and cut-out pressures and the pressure settings shall show on a calibrated dial. The switch shall be suitable for a momentary surge of 5,000 pounds per square inch and shall

have a minimum adjustable operating range of 1,500 to 3,500 pounds per square inch. The switch shall be a single-pole, single-throw type.

(12) Flow meters. - The flow meters shall have the following salient characteristics:

The flow meter shall be stainless steel body, suitable for high pressure applications and for use with the intended lubricating oil. The meter shall display flow in gal/min.

(13) Terminal blocks. - The terminal blocks shall have the following salient characteristics:

The terminal block shall be rated at least for the specific duty of the connected circuits; however, the rating shall not be less than 600 volts and 25 amperes. The terminal block shall be molded plastic with bases and barriers molded integrally. The terminal block shall be of such a design that the tip of the screw does not clamp directly onto the wire or cable conductor. The terminal block arrangement and location shall be such that the wire and cable can be supported and the circuits can be connected easily. Six spare terminals shall be provided for future use.

Where outgoing and incoming circuits enter or leave the enclosure, terminal blocks shall provide a terminal for each electrically separate circuit conductor and a terminal for every two electrically identical circuit conductors. The terminal arrangement shall group the conductors in each cable. Arrangement and location of the terminal blocks shall be such that incoming and outgoing cables can be supported. Grommets shall be provided at all holes furnished for wiring cables. Adjacent rows of terminal blocks shall be separated by at least 6 inches edge to edge. Not less than four spare terminals shall be provided.

Where wires are terminated at terminal blocks, circuit designations, as shown on the schematic and wiring diagrams, shall be machine lettered, stamped, engraved, or neatly marked with permanent ink on one side of the terminal block marking strips. Each item of electrical control equipment shall be identified with permanent markings, on or adjacent to it, showing the device name or device designation.

All conduit and wiring required for connecting the motors, pressure switches and float switches to the terminal blocks in the electrical enclosure on the hydraulic power unit shall be furnished and installed with the power unit.

Three-phase power conductors shall be carried to each motor through individual liquid-tight, oil-resistant, flexible metal conduit. The connections to the pressure switch and four-way valve solenoids shall be carried through separate liquid-tight, oil-resistant, flexible metal conduits. All conduit connections shall be made using oil-tight connectors provided with oil-resistant gaskets. Connections to the pressure switch and four-way valve solenoids shall be made with insulated wire of type XHHW, or THWN, not less than No. 10 AWG. Connections to the motors shall be made with insulated wire, No. 6 AWG, meeting the above conduit and insulation requirements.

(14) Lubricating Oil. - The lubricating oil shall have the following salient characteristics:

The lubricating oil shall be ISO VG68 (340 SSU at 38EC). The lubricating oil furnished for filling and testing the system shall be new. Brand name shall be as recommended by the Contracting Officer's Representative to match the oil currently used at the jobsite.

(15) Hydraulic tubing and piping. - The tubing shall have the following salient characteristics:

All tubing within the hydraulic power unit shall be shop fabricated. All hydraulic fluid line tubing shall conform to the JIC (Joint Industry Council) specifications. The fluid lines shall be seamless type 316 stainless steel hydraulic fluid line tubing with flare- or flareless-type fittings matching the existing installation. The fluid lines shall be of sufficient size that the fluid velocity in the pressure lines shall not exceed 10 feet per second and 5 feet per second in the suction lines. The pressure lines and wall thickness shall be selected to withstand the design internal working pressure and provide a minimum safety factor of six based on the manufacturer's rating for burst strength.

d. Manufacture. -

(1) General. - The Contractor shall place and secure all equipment and appurtenances in the hydraulic power unit. The location of mounting brackets, tapped holes, and the general layout of the equipment shall suit the particular commercial products furnished. All necessary bolts, screws, or other fasteners shall be supplied by the Contractor. The assembled hydraulic power unit shall have a neat appearance with all exterior corners, welds, and other surface irregularities ground smooth.

(2) Tubing and piping. - After each subassembly of the hydraulic power unit tubing has been fabricated, but before final assembly in the unit, thoroughly clean the inside surfaces of loose particles by drawing a lint-free cloth, saturated with solvent, through the tubing. Drain the excess solvent and dry with a blast of clean, dry, compressed air. Care shall be taken to keep any foreign matter from entering the system during or after fabrication. Special care shall be taken in making the connections to remove all burrs and to insure pressure tight joints. The Contractor shall use Dryseal American Standard taper pipe threads where threaded joints are used. Thread compound shall be used sparingly and shall be suitable for use with hydraulic oil. No thread compound shall be placed on the third of the threaded portion nearest the end of the tubing. No tape will be permitted.

(3) Identification nameplates. - Laminated plastic identification nameplates with the identification number shown on the hydraulic schematic diagram, shall be furnished on or near the valves. All nameplates shall be made in accordance with drawing 8 (40-D-6234) and shall have a letter height of one-fourth inch, except where otherwise noted. The nameplate shall be black with a white core and shall be one-eighth inch thick.

e. Shop tests. - Unless otherwise directed, all tests shall be witnessed by the Government inspector. The Contractor shall make all necessary adjustments or repairs until the control system functions properly and is approved by the Contracting Officer.

After the high pressure side of the hydraulic power unit has been assembled and necessary adjustments made, the unit shall be shop tested to determine that the unit does not leak and will deliver oil at each of the outlet ports in the quantity and at the pressure specified. The test shall be performed using the hydraulic oil specified. Prior to testing, the oil shall be circulated through the power unit, flushing the system for a period not less than 30 minutes. All filter elements shall be inspected prior to testing and cleaned or replaced as necessary. The equipment and method used for measuring the discharge shall be approved by the Contracting Officer's Representative. Discharge from the power unit shall be measured for a period not less than 10 minutes. After the power unit has been tested, all adjustable components shall be adjusted to the settings shown on the hydraulic schematic diagram.

Shop test reports. - Within 2 weeks after completion of the shop tests, the contractor shall submit a report containing verification that the unit does not leak, the unit will deliver oil at each of the outlet ports in the quantity and at the pressure specified. The Contractor shall furnish a total of five certified copies of all test reports, data, etc.

f. Shipping. - After shop fabrication and testing, the hydraulic power unit, complete with support frame, oil reservoir, and hydraulic equipment shall be crated and shipped assembled in the upright position with all piping connections sealed against entry of dirt or water. The oil reservoir shall be drained, and any movable parts shall be secured to prevent loss or damage by vibration or rough handling. Piping supplied for field installations shall be cleaned, capped or plugged, and bundled for shipment. All valves, fittings, bolts, and other miscellaneous parts for field assembly shall be boxed for shipment.

g. Storing. - While awaiting installation, the Contractor shall store the hydraulic power units and all associated parts on timber blocking and provide adequate cover to protect the equipment from weather and damage. The cost to repair any damage caused by improper storage shall be at the contractor's expense. Repairs shall be performed by the Contractor and shall be subject to the approval of the Contracting Officer.

h. Field assembly and installation. - The Contractor shall install the support frames and hydraulic power units where shown on the drawings. Installation shall be in accordance with the equipment manufacturer's recommendations, recognized industry codes and standards, and the following provisions:

- (1) Field assembly of the hydraulic power units shall include: installing the Government-furnished equipment for the low pressure side of bearing lubricating system; connecting the piping from the turbine and generator to the power unit; installing piping supports; all other mechanical and electrical connections required to make a fully operational hydraulic power unit and lubricating system.

(2) Power and controls - Connection of power and control equipment between the power unit and the remote control cabinet shall be coordinated with the Contracting Officer's Representative.

(3) The random length piping shall be cut, threaded, or prepared for welding, reamed, fitted, thoroughly cleaned, and installed by the Contractor so that all joints are oil-tight and the installation is neat in appearance. A thread compound which is satisfactory to the Contracting Officer's Representative shall be used on all threaded joints in the control systems. No thread compound shall be placed on the third of the thread length nearest the end of the tubing and no tape will be permitted. Special care shall be used to keep the hydraulic system absolutely clean and free from all dirt or moisture, both before and after installation. After each piping subassembly has been fabricated but before installation in the system, it shall be completely deburred and thoroughly cleaned. The inside surfaces near any welded joints shall be cleaned, using a power-driven flue or tube wire brush. In addition, all piping shall be cleaned by drawing a lint-free cloth impregnated with a suitable solvent through the tubing. The interior of the piping shall then be dried with a blast of clean compressed air which has been filtered through a dirt and moisture trap.

(4) Servicing the hydraulic power units with lubricating oil.

(5) Flushing. - After the hydraulic power units have been assembled and necessary adjustments made, oil shall be circulated through the power unit, flushing the system for a period not less than 30 minutes. Flushing oil shall be the same oil currently used at the jobsite at the time the equipment is ready for testing. All filter elements shall be inspected prior to testing and cleaned or replaced as necessary.

(6) Field Testing. - Unless otherwise directed, all tests shall be witnessed by the Government inspector or the Contracting Officer's Representative. After the hydraulic power units are completely installed and filled with oil, they shall be flushed by circulating oil through the fluid lines for a period not less than 30 minutes. All filter elements shall be inspected prior to testing and cleaned or replaced as necessary. The system shall then be tested at the maximum relief valve setting in all modes of operation to check for leaks, confirm required pressure settings, determine needle valve adjustments, and ensure proper operation of all hydraulic and electrical components. Any sources of oil leaks shall be repaired and the system retested. Any faulty hydraulic or electrical components shall be repaired or replaced and the system retested. The pressure relief valves, flow control valves, oil level switches and oil pressure switches shall be adjusted to the required settings. After the hydraulic power units are operational and all adjustments are finalized, each turbine/generator shall be operated through a complete startup and shutdown cycle to verify proper system integration and operation. Components shall be adjusted until all parts operate properly. After all testing and adjusting is completed to the satisfaction of the Contracting Officer's Representative, the Contractor shall certify in writing and on company letterhead that the equipment is fully serviced, checked, tested, adjusted and ready for operation. The certification shall be delivered to the Contracting Officer's Representative.

Field test report and certification. - Within 2 weeks after completion of the field tests, the contractor shall submit a report containing the test procedures, processes followed, results of each valve setting and mode, list pressure settings, list any adjustments made, list settings of all valves and switches and certification in writing and on company letterhead that the equipment is fully serviced, checked, tested, adjusted and ready for operation. The Contractor shall furnish a total of five certified copies of all test reports, data, etc.

Submittals - Submittals shall be in accordance with this subparagraph, paragraph 1.03 (Submittal Requirements) and 1.04 (Drawings and Data to be Furnished by the Contractor).

i. Cost. - The cost for design, assembly, shop test, furnishing, field assembly, installation, servicing and field testing the hydraulic power units and corresponding components as well as furnishing spare parts, shall be included in the applicable lump-sum prices bid therefore in the schedule which prices shall include the cost of all labor and materials necessary to perform the work required by this paragraph.

PART IV
CONTRACT DOCUMENTS, EXHIBITS, AND ATTACHMENTS

1. List of Attachments

(a) Drawings, General

The drawings for the existing installation are included in these specifications to show the current configuration of control equipment and conduit routing. These drawings are to be used for bidding purposes only, since the details may vary from actual conditions.

Some of the drawings included herein show equipment that is not a part of the work required under these specifications. Equipment shown on these drawings which is not applicable under these specifications shall be disregarded. Reference drawings referred to on specifications drawings, and not included herein, are not considered necessary for bidding purposes but shall be furnished to the Contractor, where necessary, for installation purposes. Where details shown on standard drawings 40-D-, and 104-D- series differ from those shown on the other drawings or the requirements of these specifications, the details shown on other drawings or the requirements of the specifications shall govern. In the event there are minor differences as determined by the Contracting Officer's Representative between details and dimensions shown on the drawings and those of existing features at the site, the details and dimensions of existing features at the site shall govern.

(b) Additional copies of drawings. - The Contractor will be furnished such additional copies of the specifications and drawings as may be required for carrying out the work. Full-size contact prints of the original drawings from which the attached reproductions were made, other than standard drawings 40-D-, and 104-D- series, will be furnished to the Contractor for construction purposes upon request. Additional prints of the standard drawings 40-D-, and 104-D- series will be furnished upon request. The number of prints of each drawing furnished to the Contractor will be limited to 10 contact prints and one reproducible.

(c) List of Drawings

The following drawings are made a part of these specifications:

HEADGATE ROCK POWERPLANT
MECHANICAL

New Drawings:

1. 1117-D-1946 - Hydraulic Power Unit - Bearing Lubricating System - General Arrangement - Plan-View-Materials List
2. 1117-D-1947 - Hydraulic Power Unit - Bearing Lubricating System - Guide Bearing Engineering Data

Existing Installation Drawings:

3. 1117-D-216 - Piping Details - Material Schedule
4. 1117-D-235 - Piping Layout - Exposed Piping Part Plan - Floor EL. 327.50
5. 1117-D-236 - Piping Layout - Exposed Piping Part Plan - Floor EL. 327.50
6. 1117-D-240 - Piping Layout - Exposed Piping - Section F-F

Standard Drawings:

7. 40-D-6032 - Induction Motors - Design and Nameplate Data to be Furnished by Contractor
8. 40-D-6234 - Standard Nameplates

Manufacturers Drawings:

Airline Hydraulics Corporation:

9. A-3389 Rev A Sheet 1 - Hydraulic Schematic (Voith Hydro)
10. A-3389 Rev A Sheet 2 - Wiring Diagram & Electrical Schematic (Voith Hydro)
11. A-3389 Rev A Sheet 3 - Gen. Arrg't - Pumping Unit (Voith Hydro)

Voith Hydro Inc.:

12. 6563-AX-1 Rev 07 - General Arrangement
13. 6099-MU-2 Rev 04 - Bearing Lube Schematic
14. 4840-ACX-1 Rev 01 - Piping Plan
15. 4840-ACY-1 Rev 02 - Piping Elevation
16. 4840-ACZ-1 Rev 01 - Piping Details
17. 126-56042-0002 F - Center Flange Bearing, Split
18. 063-000-160 (Sheet 1 of 1) - 18.11" DIA x 18.11" LG. Pressure Lube Guide Bearing
19. 000-303-174 (Sheet 1 of 1) - 18.11" DIA x 18.11" LG. Journal Bearing
20. 061-000-085 (Sheet 1 of 1) - 34.00" - (8)x(8) PAD Thrust Brg & 14.96" x 14.96" LG Journal Bearing - Pedestal Mounted
21. 000-303-186 (Sheet 1 of 1) 14.96" x 14.96" LG Journal Bearing

PART V
SOLICITATION PROVISIONS

1. 52.212-1 Instructions to Offerors -- Commercial Items (Jun 1999)

(a) Standard Industrial Classification (SIC) Code and Small Business Size Standard. The SIC code and small business size standard for this acquisition appear in Block 10 of the solicitation cover sheet (SF 1449). However, the small business size standard for a concern which submits an offer in its own name, but which proposes to furnish an item which it did not itself manufacture, is 500 employees.

(b) Submission of Offers. Submit signed and dated offers to the office specified in this solicitation at or before the exact time specified in this solicitation. Offers may be submitted on the SF 1449, letterhead stationery, or as otherwise specified in the solicitation. As a minimum, offers must show----

(1) The solicitation number;

(2) The time specified in the solicitation for receipt of offers;

(3) The name, address, and telephone number of the offeror;

(4) A technical description of the items being offered in sufficient detail to evaluate compliance with the requirements in the solicitation. This may include product literature, or other documents, if necessary;

(5) Terms of any express warranty;

(6) Price and any discount terms;

(7) "Remit to" address, if different than mailing address;

(8) A completed copy of the representations and certifications at FAR 52.212-3;

(9) Acknowledgment of Solicitation Amendments;

(10) Past performance information, when included as an evaluation factor, to include recent and relevant contracts for the same or similar items and other references (including contract numbers, points of contact with telephone numbers and other relevant information); and

(11) If the offer is not submitted on the SF 1449, include a statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation. Offers that fail to furnish required representations or information, or reject the terms and conditions of the solicitation may be excluded from consideration.

(c) Period for Acceptance of Offers. The offeror agrees to hold the prices in its offer firm for 30 calendar days from the date specified for receipt of offers, unless another time period is specified in an addendum to the solicitation.

(d) Product Samples. When required by the solicitation, product samples shall be submitted at or prior to the time specified for receipt of offers. Unless otherwise specified in this solicitation, these samples shall be submitted at no expense to the Government, and returned at the sender's request and expense, unless they are destroyed during preaward testing.

(e) Multiple Offers. Offerors are encouraged to submit multiple offers presenting alternative terms and conditions or commercial items for satisfying the requirements of this solicitation. Each offer submitted will be evaluated separately.

(f) Late Offers. Offers or modifications of offers received at the address specified for the receipt of offers after the exact time specified for receipt of offers will not be considered.

(g) Contract Award (not applicable to Invitation for Bids). The Government intends to evaluate offers and award a contract without discussions with offerors. Therefore, the offeror's initial offer should contain the offeror's best terms from a price and technical standpoint. However, the Government reserves the right to conduct discussions if later determined by the Contracting Officer to be necessary. The Government may reject any or all offers if such action is in the public interest; accept other than the lowest offer; and waive informalities and minor irregularities in offers received.

(h) Multiple Awards. The Government may accept any item or group of items of an offer, unless the offeror qualifies the offer by specific limitations. Unless otherwise provided in the Schedule, offers may not be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit prices offered, unless the offeror specifies otherwise in the offer.

(i) Availability of Requirements Documents Cited in the Solicitation.

(1) (i) The GSA Index of Federal Specifications, Standards and Commercial Item Descriptions, FPMR Part 101-29, and copies of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained for a fee by submitting a request to--GSA Federal Supply Service Specifications Section, Suite 8100, 470 L'Enfant Plaza, SW., Washington, DC 20407, Telephone (202) 619-8925, Facsimile (202) 619-8978.

(ii) If the General Services Administration, Department of Agriculture, or Department of Veterans Affairs issued this solicitation, a single copy of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained free of charge by submitting a request to the addressee in paragraph (i)(1)(i) of this provision. Additional copies will be issued for a fee.

(2) The DoD Index of Specifications and Standards (DoDISS) and documents listed in it may be obtained from the Department of Defense Single Stock Point (DoDSSP), Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094 (telephone (215) 697-2667/2179, Facsimile (215) 697-1462.

(i) Automatic distribution may be obtained on a subscription basis.

(ii) Order forms, pricing information, and customer support information may be obtained--

(A) By telephone at (215) 697-2667/2179; or

(B) Through the DoDSSP Internet Site at <http://www.dodssp.daps.mil>.

(3) Nongovernment (voluntary) standards must be obtained from the organization responsible for their preparation, publication or maintenance.

(j) Data Universal Numbering System (DUNS) Number. (Applies to offers exceeding \$25,000.) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" followed by the DUNS number that identifies the offeror's name and address. If the offeror does not have a DUNS number, it should contact Dun and Bradstreet to obtain one at no charge. An offeror within the United States may call 1-800-333-0505. The offeror may obtain more information regarding the DUNS number, including locations of local Dun and Bradstreet Information Services offices for offerors located outside the United States, from the Internet home page at <http://www.dnb.com/>. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at globalinfo@mail.dnb.com.

2. Addendum to 52.212-1 Instructions to Offerors -- Commercial Items (Aug 1998)

(a) Modification to paragraph (c). The offeror agrees to hold the prices in its offer firm for 60 calendar days from the date specified for receipt of offers.

(b) Modification to paragraph (h). Multiple awards will not be made on this solicitation.

(c) Additional Applicable Provisions:

(1) 52.233-2 Service of Protest (Aug 1996) Department of Interior (Jul 1996) (Deviation)

(a) Protests as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from: Contracting Officer, Bureau of Reclamation, P.O. Box 61470, Boulder City NV 89006-1470.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(c) A copy of the protest served on the Contracting Officer shall be simultaneously furnished by the protester to the Department of Interior Assistant Solicitor for Procurement and Patents, 1849 C Street, NW, Room 6511, Washington, D.C. 20240.

(2) WBR 1452.233-80 Agency Procurement Protests -- Bureau of Reclamation (Sep 1997)

(a) Executive Order 12979, Agency Procurement Protests, establishes policy on agency procurement protests. This policy is implemented at section 33.103 of the Federal Acquisition Regulation. For solicitations issued by the Bureau of Reclamation, an interested party may request independent review of its protest by the Bureau Procurement Chief.

(b) This independent review is available as an alternative to consideration by the contracting officer or as an appeal of the contracting officer's decision on a protest. An interested party may:

(1) Protest to the contracting officer;

(2) Protest directly to the Bureau Procurement Chief, without first protesting to the contracting officer; or

(3) Appeal a contracting officer's decision to the Bureau Procurement Chief.

(c) An appeal of the contracting officer's decision must be received by the Bureau Procurement Chief (Bureau of Reclamation, Denver Federal Center, Bldg. 67, P.O. Box 25007 (D-7800), Denver, CO 80225-25007) no later than 3 days after receipt of that decision by the interested party. The Bureau Procurement Chief shall render a decision no later than 5 days after receipt of an appeal.

(d) If there is an appellate review of the contracting officer's decision by the Bureau Procurement Chief, it will not extend the General Accounting Officer's timeliness requirements. Therefore, any subsequent protest to the GAO must be filed within 10 days of knowledge of initial adverse agency action (4 CFR 21.2(a)(3)).

(3) Site Visit

(a) Offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) An organized site visit has been scheduled for August 23, 1999, at 10 am Mountain Standard Time. Those offerors wishing to attend the site visit should contact the Parker Dam Facilities Manager at 760-663-3712.

(c) Participants will meet at the Headgate Rock Dam Powerplant parking area.

(4) WBR 1452.215-81 General Proposal Instructions -- Bureau of Reclamation (Jul 1997)

(a) General contents. Each proposal shall: be specific and complete in every detail; conform to all solicitation provisions, clauses, or other requirements; be logically assembled, practical, legible, clear, concise, coherent; and contain appropriately numbered pages of each volume or part.

(b) Arrangement of Proposal. The proposal shall consist of one complete volume. The offeror should an original and two complete copies of the proposal.

(c) The proposal should include such information as:

(1) A fully executed copy of Standard Form 1449 "Solicitation/Contract/Order for Commercial Items";

(2) A fully completed set of the "SF1449 Block 20 Continuation" (Schedule) pages, with all prices entered for the Schedule Items.

(3) A fully completed set of the proposed completion schedule (see page 13).

(4) Past performance information -

(i) Reference - Provide a list of relevant past performance references of projects similar in size and scope to this requirement. Your listing must include: customer's name, address and name/phone number of contact; dollar amount of contract; contract number; dates of performance; and a brief description of the project.

(ii) Terminations - Provide a list of any Federal/State Government contracts/subcontracts or commercial contracts/subcontracts awarded to your firm (or that identified key personnel have participated in) in the past 5 years which were terminated for default, convenience or any other reason. Include the information requested in (a) above and a narrative explanation as to the circumstances that occasioned the termination and a discussion of its resolution.

(iii) Claims - Provide a list of any claims under any Federal or State Government contracts filed by your firm in the past 5 years. Include all the information requested in (a) above for each claim and a brief explanation as to the circumstances that necessitated the filing of the claim as well as its ultimate resolution.

(iv) Late performance/unacceptable items - Provide a listing of any contracts/subcontracts which were not completed in the required performance time schedule under any Government or commercial contract your firm has been awarded in the last 5 years. Describe the reason(s) for the late performance, including any mitigating factors (e.g. were there circumstances which were beyond your control, such as delay by the Government or

commercial customer?), and discuss the resolution/outcome of the late performance. Have any of your firm's previous contracts/subcontracts had options which were not exercised due to late performance?

Also prepare a list of any contract/subcontract items/supplies/installations which were rejected or deemed unacceptable by a Government Contracting Officer or other customer in the same 10-year period.

(v) Pre-award factory inspections - Have the facilities your firm is proposing to utilize ever been determined to be unacceptable during a pre-award factory inspection by a Government agency? If so, discuss what occasioned this determination and what you firm has done to remedy/improve the unacceptable facility.

NOTE: In addition to the past performance information submitted with your proposal, Reclamation may gather additional information from other sources, both inside and outside of the Government.

(4) A fully executed and completed copy of the provision entitled "52.212-3 Offeror Representations and Certifications -- Commercial Items".

3. 52.212-2 Evaluation -- Commercial Items (Jan 1999)

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers:

(1) Timely Design, Fabrication, Installation and Testing of Unit #2 Turbine and Generator Bearings Lubricating System and Hydrostatic Lift System Hydraulic Power Unit.

(2) Past Performance.

- (i) Past Projects,
- (ii) Reliability, and
- (iii) Facilities

(3) Price.

Delivery and past performance, when combined, are significantly more important than cost or price as shown below in the Relative Weight of Evaluation Factors paragraph. Non-cost factors comprise 70% of the total evaluated weight.

(b) Relative Weight of Evaluation Factors.

(1) Timely Design, Fabrication, Installation and Testing of Unit #2 Turbine and Generator Bearings Lubricating System and Hydrostatic Lift System Hydraulic Power Unit. This evaluation factor will comprise 60% of the total evaluation weight.

The dates specified in the schedule are considered highly important. Evaluation will be based on the offeror's ability to design, fabricate, install and test the Generator Bearings Lubricating System and Hydrostatic Lift System Hydraulic Power Unit in a shorter period of time than the specified required time stated in the schedule.

The Government will evaluate equally, as regards time of delivery, offers that propose completion of Generating Unit No. 2 within the Desired and Required Completion Schedules. Offers that propose to meet or complete the work prior to the Desired Completion Schedule (December 1, 1999) will be awarded the maximum points available. Offerors proposing less than the Desired Completion Date, but more than the maximum Required Completion Date (December 2, 1999 thru January 30, 2000) will be scored proportionately less than the maximum. Offerors meeting the maximum Required Completion Date (January 31, 2000) will receive no points. Offers failing to include the "Proposed Completion Schedule" with their proposals will not be considered for award.

Offers placing conditions of delivery (e.g. award of contract by a specific date, approval of drawings, etc.) will not be considered for award. See provision WBR 1452.215-81 General Proposal Instructions, for specific information to be provided with the offer regarding evaluation of this factor.

(2) Past Performance. This evaluation factor will comprise 10% of the total evaluation weight.

(i) Past Projects. The Offeror shall furnish a list showing the inservice date, type of contract, performance record for each of the generator armature windings, cores and exciter reconditioning listed in (1) above, the address, and telephone number, the contract dollar value initial and final, for each project listed in (1) above. Provide a list of projects similar in scope and magnitude to the work required under this solicitation which the offeror has completed during the last 5 years. For each project, include:

- a. Name of the project;
- b. Description of the work;
- c. Contract number, date and type;
- d. Name and address of the acquiring Government agency or commercial customer;
- e. Initial contract amount and final contract amount;
- f. Any problems encountered in performance of the work and corrective action(s) taken; and
- g. Name(s) and telephone number(s) of references from the acquiring agency or customer who may be contacted for further information.

(ii) Reliability. The Offeror shall furnish a list of customer's with the following information on armature windings, core and exciters of a similar design including (i) those under warranty, (ii) those in which the warranty period has expired and (iii) those which have failed while under warranty.

(iii) Facilities. The Offeror shall provide information on all plant and test facilities (including Government facilities) proposed to perform and accomplish the work. The need for any special plants and/or facilities shall be fully substantiated. Information shall be furnished on any planned use of alternate plants/facilities. Reclamation may conduct a preaward inspection of the proposed manufacturing facilities.

(3) Price. This evaluation factor will comprise 30% of the total evaluation weight.

The following formula will be used to evaluate price:

$$\frac{[30 - \{30 \times \frac{(\text{Proposed Price} - \text{Lowest Proposed Price})}{\text{Lowest Proposed Price}}\}]}{\text{Lowest Proposed Price}}$$

The lowest points available for this factor is zero.

(c) A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

4. 52.212-3 Offeror Representations and Certifications -- Commercial Items (Jun 1999) Alternate II (Oct 1998)

(a) Definitions. As used in this provision:

"Emerging small business" means a small business concern whose size is no greater than 50 percent of the numerical size standard for the standard industrial classification code designated.

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

"Women-owned small business concern" means a small business concern--

(1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

“Women-owned business concern” means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Taxpayer Identification Number (TIN) (26 U.S.C. 6109, 31 U.S.C. 7701). *(Not applicable if the offeror is required to provide this information to a central contractor registration database to be eligible for award.)*

(1) All offerors must submit the information required in paragraphs (b)(3) through (b)(5) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the Internal Revenue Service (IRS).

(2) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(3) Taxpayer Identification Number (TIN).

- 9 TIN: _____
- 9 TIN has been applied for.
- 9 TIN is not required because:
 - 9 Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;
 - 9 Offeror is an agency or instrumentality of a foreign government;
 - 9 Offeror is an agency or instrumentality of the Federal Government.

(4) Type of organization.

- 9 Sole proprietorship;
- 9 Partnership;
- 9 Corporate entity (not tax-exempt);
- 9 Corporate entity (tax-exempt);
- 9 Government entity (Federal, State, or local);
- 9 Foreign government;
- 9 International organization per 26 CFR 1.6049-4;
- 9 Other _____

(5) Common parent.

- 9 Offeror is not owned or controlled by a common parent;
- 9 Name and TIN of common parent:
 - Name _____
 - TIN _____

(c) Offerors must complete the following representations when the resulting contract is to be performed inside the United States, its territories or possessions, Puerto Rico, the Trust Territory of the Pacific Islands, or the District of Columbia. *Check all that apply.*

(1) Small business concern. The offeror represents as part of its offer that it () is, () is not a small business concern.

(2) Small disadvantaged business concern. ***[Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.]*** The offeror represents, for general statistical purposes, that it 9 is, 9 is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) Women-owned small business concern. ***[Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.]*** The offeror represents that it 9 is, 9 is not a women-owned small business concern.

Note: Complete paragraphs (c)(4) and (c)(5) only if this solicitation is expected to exceed the simplified acquisition threshold.

(4) Women-owned business concern (other than small business concern). ***[Complete only if the offeror is a woman-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.]*** The offeror represents that it 9 is a women-owned business concern.

(5) Tie bid priority for labor surplus area concerns. If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price:

(6) Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program. ***[Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.]***

(i) ***(Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the four designated industry groups (DIGs).)*** The offeror represents as part of its offer that it () is, () is not an emerging small business.

(ii) ***(Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or four designated industry groups (DIGs).)*** Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (*check the Employees column if size standard stated in the solicitation is expressed in terms of number of employees*); or

(B) Offeror's average annual gross revenue for the last 3 fiscal years (*check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts*)

(Check one of the following):

Number of Employees Average Annual Gross Revenues

<input type="checkbox"/> 50 or fewer ...	<input type="checkbox"/> \$1 million or less
<input type="checkbox"/> 51-100	<input type="checkbox"/> \$1,000,001-\$2 million
<input type="checkbox"/> 101-250	<input type="checkbox"/> \$2,000,001-\$3.5 million
<input type="checkbox"/> 251-500	<input type="checkbox"/> \$3,500,001-\$5 million
<input type="checkbox"/> 501-750	<input type="checkbox"/> \$5,000,001-\$10 million
<input type="checkbox"/> 751-1,000	<input type="checkbox"/> \$10,000,001-\$17 million
<input type="checkbox"/> Over 1,000	<input type="checkbox"/> Over \$17 million

(7) (Complete only if the solicitation contains the clause at FAR 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns, or FAR 52.219-25, Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.)

(i) General. The offeror represents that either--

(A) It () is, () is not certified by the Small Business Administration as a small disadvantaged business concern and is listed, on the date of this representation, on the register of small disadvantaged business concerns maintained by the Small Business Administration, and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); or

(B) It () has, () has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(ii) Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns. The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(7)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. The offeror shall enter the name of the small disadvantaged business concern that is

participating in the joint venture:

_____.]

(iii) Address. The offeror represents that its address [] is, [] is not in a region for which a small disadvantaged business procurement mechanism is authorized and its address has not changed since its certification as a small disadvantaged business concern or submission of its application for certification. The list of authorized small disadvantaged business procurement mechanisms and regions is posted at <http://www.arinet.gov/References/sdbadjustments.htm>. The offeror shall use the list in effect on the date of this solicitation. "Address," as used in this provision, means the address of the offeror as listed on the Small Business Administration's register of small disadvantaged business concerns or the address on the completed application that the concern has submitted to the Small Business Administration or a Private Certifier in accordance with 13 CFR part 124, subpart B. For joint ventures, "address" refers to the address of the small disadvantaged business concern that is participating in the joint venture.

(d) Representations required to implement provisions of Executive Order 11246--

(1) Previous Contracts and Compliance. The offeror represents that--

(i) It [] has, [] has not, participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the clause originally contained in Section 310 of Executive Order 10925, or the clause contained in Section 201 of Executive Order 11114; and

(ii) It [] has, [] has not, filed all required compliance reports.

(2) Affirmative Action Compliance. The offeror represents that--

(i) It () has developed and has on file, () has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR parts 60-1 and 60-2), or

(ii) It () has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) Certification Regarding Payments to Influence Federal Transactions (31 U.S.C. 1352). **(Applies only if the contract is expected to exceed \$100,000.)** By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract.

(f) Buy American Act--Trade Agreements--Balance of Payments Program Certificate.
(Applies only if FAR clause 52.225-9, Buy American Act--Trade Agreement--Balance of Payments Program, is included in this solicitation.)

(1) The offeror hereby certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product (as defined in the clause entitled "Buy American Act--Trade Agreements Balance of Payments Program") and that components of unknown origin have been considered to have been mined, produced, or manufactured outside the United States, a designated country, a North American Free Trade Agreement (NAFTA) country, or a Caribbean Basin country, as defined in section 25.401 of the Federal Acquisition Regulation.

(2) Excluded End Products:

LINE ITEM NO.	COUNTRY OF ORIGIN
_____	_____
_____	_____

(List as necessary)

(3) Offers will be evaluated by giving certain preferences to domestic end products, designated country end products, NAFTA country end products, and Caribbean Basin country end products over other end products. In order to obtain these preferences in the evaluation of each excluded end product listed in paragraph (f)(2) of this provision, offerors must identify and certify below those excluded end products that are designated or NAFTA country end products, or Caribbean Basin country end products. Products that are not identified and certified below will not be deemed designated country end products, NAFTA country end products, or Caribbean Basin country end products. Offerors must certify by inserting the applicable line item numbers in the following:

(i) The offeror certifies that the following supplies qualify as "designated or NAFTA country end products" as those terms are defined in the clause entitled "Buy American Act--Trade Agreements--Balance of Payments Program:"

 (Insert line item numbers)

(ii) The offeror certifies that the following supplies qualify as "Caribbean Basin country end products" as that term is defined in the clause entitled "Buy American Act--Trade Agreements--Balance of Payments Program":

 (Insert line item numbers)

(4) Offers will be evaluated in accordance with FAR Part 25.

(g) (1) Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program. ***(Applies only if FAR clause 52.225-21, Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program, is included in this solicitation.)***

(i) The offeror certifies that each end product being offered, except those listed in paragraph (g)(1)(ii) of this provision, is a domestic end product (as defined in the clause entitled "Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program," and that components of unknown origin have been considered to have been mined, produced, or manufactured outside the United States.

(ii) Excluded End Products:

LINE ITEM NO. COUNTRY OF ORIGIN

(List as necessary)

(iii) Offers will be evaluated by giving certain preferences to domestic end products or NAFTA country end products over other end products. In order to obtain these preferences in the evaluation of each excluded end product listed in paragraph (g)(1)(ii) of this provision, offerors must identify and certify below those excluded end products that are NAFTA country end products. Products that are not identified and certified below will not be deemed NAFTA country end products. The offeror certifies that the following supplies qualify as "NAFTA country end products" as that term is defined in the clause entitled "Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program":

(Insert line item numbers)

(iv) Offers will be evaluated in accordance with Part 25 of the Federal Acquisition Regulation. In addition, if this solicitation is for supplies for use outside the United States, an evaluation factor of 50 percent will be applied to offers of end products that are not domestic or NAFTA country end products.

(2) Alternate I. If Alternate I to the clause at 52.225-21 is included in this solicitation, substitute the following paragraph (g)(1)(iii) for paragraph (g)(1)(iii) of this provision:

(g)(1)(iii) Offers will be evaluated by giving certain preferences to domestic end products or Canadian end products over other end products. In order to obtain these preferences in the evaluation of each excluded end product listed in paragraph (b) of this provision, offerors must identify and certify below those excluded end products that are Canadian end products. Products that are not identified and certified below will not be deemed Canadian end products. The offeror certifies that the following supplies qualify as "Canadian end products" as that term is defined in the clause entitled "Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program": _____

(Insert line item numbers)

(h) Certification Regarding Debarment, Suspension or Ineligibility for Award (Executive Order 12549). The offeror certifies, to the best of its knowledge and belief, that--

(1) The offeror and/or any of its principals () are, () are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency, and

(2) () Have, () have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax invasion, or receiving stolen property; and () are, () are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses.

99-SQ-30-0016

**Attachment No. 1
Drawings**

(Not Available Online)